

## **Chapter 2**

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### **Alternatives Including the Proposed Action**

## 2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

### 2.1 INTRODUCTION

#### 2.1.1 History of the Planning Process

The Sand Point Magnuson Park Drainage, Wetland/Habitat Complex and Sports Fields/Courts Project site is located in the northeastern portion of the City of Seattle, Washington, on the site of the former Naval Station Puget Sound, Sand Point. Ownership of the Sand Point Peninsula was transferred from King County to the federal government for development of a naval air station in the early 1920s. The naval air station eventually reached a maximum size of approximately 570 acres (including some property west of Sand Point Way) in the mid-1930s. The site was used as a military facility from 1922 to 1995, with the height of operation occurring in 1945 when Sand Point functioned as a principal air base. Sand Point continued to be active after World War II. However, lobbying to convey surplus land at Sand Point to municipal ownership began in the mid-1950s. In 1970 airfield activity at Sand Point ceased and ownership of a 325-acre portion of the site was transferred from the U.S. Navy to the City of Seattle and the National Oceanic and Atmospheric Administration (NOAA). In 1975 the City-owned portion of the site (213 acres) was dedicated as Sand Point Park (it was rededicated as Magnuson Park in 1977).

On July 1, 1991, the U.S. Base Realignment and Closure Commission recommended closure of the Naval Station Puget Sound, Sand Point. In October of 1991, the federal government made its official announcement to close Sand Point and requested that the City take the lead in developing a local plan for reuse of the remaining 151-acre property. Following a multi-year planning process, the City passed Resolution 28832 in November 1993, establishing the City of Seattle Community Preferred Reuse Plan as the statement of City policy regarding reuse of Sand Point. This Resolution endorses the general objective of the City gaining ownership of the Sand Point site in order to create a multi-purpose regional center at Sand Point that will provide long-term benefit to the community.

The development of Sand Point Magnuson Park has been an ongoing community discussion for decades, since before the final closing of the airfield in 1970. A consistent theme in the various plans developed for the peninsula was creation of a City park. Separate plans for the park prepared for the City in the 1970s, 1980s and 1990s each include the development of sports fields and wetland areas in the park concept. The Seattle City Council has affirmed its goals for the development of the park over the years through a variety of actions. These included approval of: the Seattle Parks and Recreation Plan 2000 (Seattle Department of Parks and Recreation, 2000), the Joint Athletic Fields Development Program (Seattle Department of Parks and Recreation, 1997), the Sand Point Physical Development Management Plan (City of Seattle, 1997), and the 1999 Magnuson Park Concept Design (Seattle Department of Parks and Recreation, 1999) as amended by the City Council in 2001. The combination of these documents provides the statement of objectives for this proposed action.

The City prepared a programmatic environmental impact statement (EIS) for the Sand Point Reuse Project in 1996 (City of Seattle, 1996). Proposed actions addressed in that document included development of athletic fields and wetlands in a portion of the 151-acre property. Based on that environmental review, in 1997 the City Council adopted Resolution 29249 approving the Sand Point Physical Development Management Plan (PDMP). The PDMP identified six activity areas within the Reuse Project boundary, based on the types of activities proposed for the different sectors of the property.

One of the six areas was the Magnuson Park Open Space/Recreation Expansion Area, with planned uses to include additional sports fields and open space. The Open Space/Recreation Expansion Area included approximately 58 acres in the east-central and southeastern portions of the Reuse Project area, and it encompasses the northwestern and southwestern parts of the 153-acre project site. The remainder of the project site (approximately 95 acres) is part of the original Magnuson Park parcel that was transferred to the City in 1970.

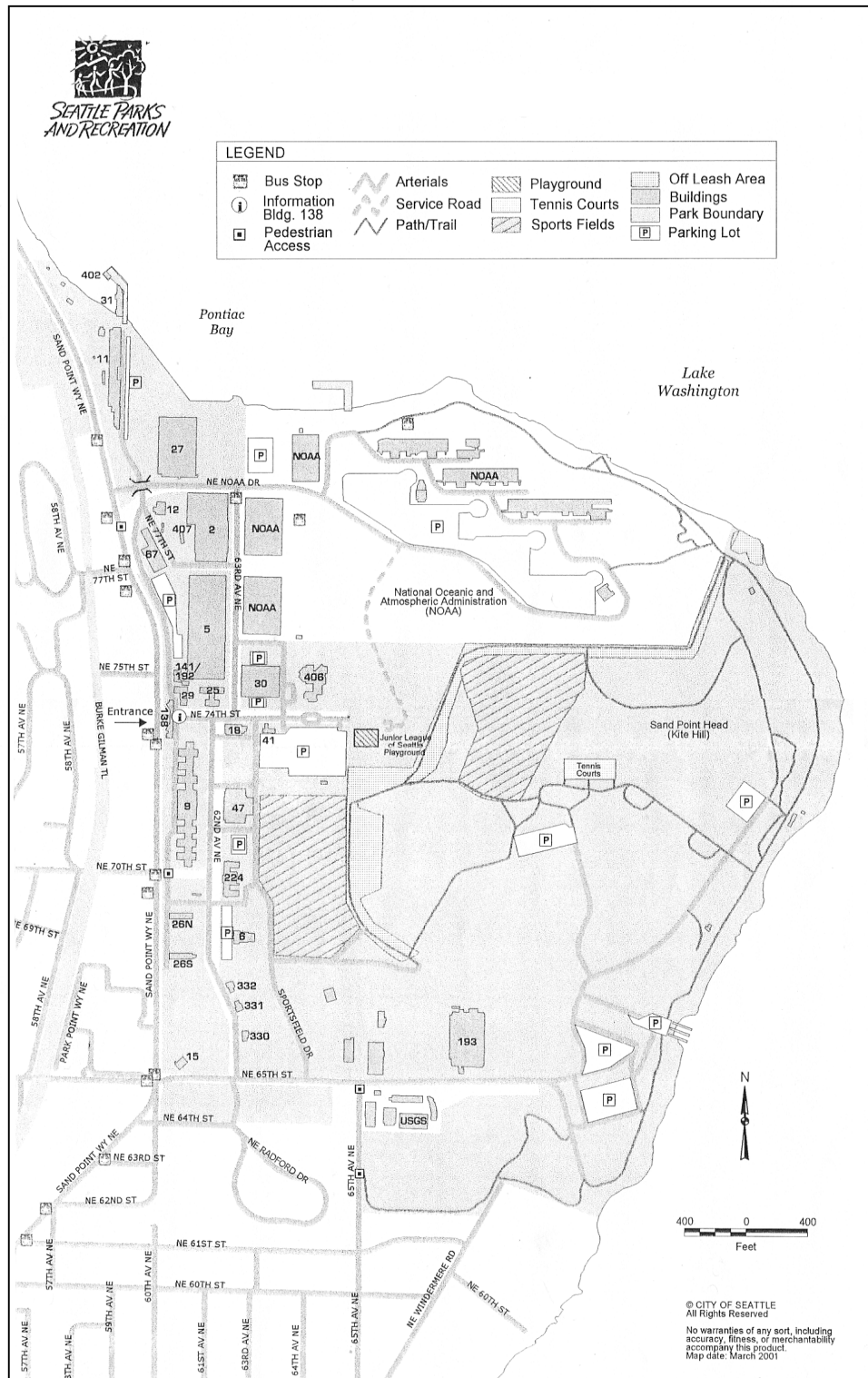
Following adoption of the 1997 Physical Development Management Plan, Seattle Department of Parks and Recreation efforts to refine the plans for the Park continued. In November 1999 the City Council adopted Resolution 30063 approving the Magnuson Park Concept Design, which provided updates to the 1997 PDMP. In April 2001, the Council approved Resolution 30293, which amended the Magnuson Park Concept Design and Resolution 30063. Resolution 30293 provided additional guidance from the City Council on the sports fields and courts configuration. The overall objectives for the development of the sports fields and wetland/habitat project remained essentially the same through the adoption of those resolutions.

In addition to the 1997 Physical Development Management Plan and the Magnuson Park Concept Design, the City Council has also approved a Joint Athletic Fields Development Plan (JAFDP). The 1997 JAFDP provides programmatic guidance to the Department of Parks and Recreation on the development of athletic facilities citywide. The JAFDP addresses facilities at both Parks Department and Seattle School District properties, including the development of fields at Sand Point Magnuson Park. The original document approved in 1997 outlined numerous specific fields and amenities desired to be included at Sand Point Magnuson Park. On March 25, 2002 the Seattle Board of Park Commissioners recommended approval of the 2002 Joint Athletic Facilities Development Program, an update to the original 1997 program. The 2002 JAFDP update likewise includes a major expansion of sports field capacity at Sand Point Magnuson Park, along with field improvements at numerous other sites within the city. Pursuant to the recommendation of the Parks Board, the Mayor will review the 2002 JAFDP and submit it to the City Council for formal action.

### **2.1.2 Existing Site Conditions**

The project site is located entirely within the boundaries of Sand Point Magnuson Park, which generally lies north of NE 65<sup>th</sup> Street, south of NE 85<sup>th</sup> Street, and east of Sand Point Way NE in the northeastern area of Seattle. The project site and the larger Sand Point Magnuson Park are owned by the City of Seattle. The park is operated by the Sand Point Magnuson Park Division of the Seattle Department of Parks and Recreation. The Sand Point Magnuson Park Division is a distinct management entity charged with the overall operation and long-range development of the Sand Point Magnuson Park facilities. The Sand Point Magnuson Park property includes a total area of 352 acres, including 19 acres administered by the Sand Point Community Housing Association and 11 acres administered by the University of Washington. The project site for the proposed action includes 153 acres located generally within the southern and eastern sectors of the park. This area is located to the east of the main concentration of old Naval Station Puget Sound buildings (see **Figure 2.1-1**, Vicinity Map).

Adjacent to the project site to the north is a narrow corridor of land within Sand Point Magnuson Park and the National Oceanic and Atmospheric Administration (NOAA) Western Administrative Support Center. To the northeast is the Kite Hill area of Sand Point Magnuson Park, and to the east is Lake Washington.



**Figure 2.1-1  
Sand Point Magnuson Park Site Map**

To the south is NE 65<sup>th</sup> Street, the Radford Court family housing complex operated by the University of Washington, and the Western Fisheries Research Center operated by the U.S. Geological Survey (USGS). Immediately to the west are some of the old naval station buildings. Further west is Sand Point Way NE, a city arterial and the main access to the project site. Across Sand Point Way NE are multifamily residential uses, two neighborhood commercial uses and a medical support office building currently under construction. Beyond the multifamily development lies the Burke-Gilman Trail and single-family residences.

Most of the Sand Point peninsula was filled, graded, and paved as a result of the construction activity that developed the site into a major military airfield. This has resulted in highly compacted soils and a relatively flat site (see **Figure 2.1-2**, Existing Site Conditions). The lack of significant slope across the site promotes winter ponding in minor depressions, and the unplanned establishment of wetland-like conditions in some areas that impound water or sustain saturation long enough. The existing vegetation is a result of historic actions and ongoing maintenance. The interior of the site contains a variety of both upland and wetland habitats. The majority of the interior, more natural portion of the site is technically wetland due to the impermeable nature of the fill soils and the flat gradient of the site. Wet meadows, seasonal marshes, shrub wetlands and forested wetlands are present on site. The upland habitat consists of mowed grasslands, meadow, savannah (an open mix of meadow and tree/shrub thickets) and non-native shrub thickets. Existing upland areas are often dominated by introduced species, such as seeded grasses, Himalayan blackberry and hybridized poplar (see **Section 3.3 Plants/Wetlands** for further information).

Sand Point Magnuson Park currently provides a diverse array of opportunities for structured and unstructured recreation and leisure activities, scheduled and informal sports, nature-oriented activities, and arts, cultural and education functions. Many of the activities use recreational facilities originally developed by the Navy, while others occur on unprogrammed, open park lands. (See **Section 3.10 Recreation** for additional discussion of existing recreational facilities and activities.) Key existing facilities and activity areas within the overall park property include:

- a community campus area with an historic district of more than 20 former naval station structures, generally along the western edge of the park property and housing most of the arts, cultural and education activities;
- two existing sports field areas, one in the western part of the park adjacent to part of the historic district (known as the Sand Point Fields, or just the Sports Fields), the other a sports meadow area (known as the Magnuson Park Fields or the Sports Meadow) in the central portion of the park;
- a children's play area and a community garden, located generally east of the historic district and between the two sports field areas;
- an off-leash exercise area for dogs located west of the sports meadow, with a narrow extension to the Lake Washington shoreline;
- six unlighted tennis courts, located just east of the sports meadow;
- a shoreline area along Lake Washington that includes a swimming beach, wading pool and picnic shelters;
- a low, open, grassy hill, known as Sand Point Head or Kite Hill, located between the tennis courts and the beach area;
- a boat launch facility on Lake Washington in the southeastern corner of the park;

**Figure 2.1-2**  
**Existing Site Conditions**  
11x17

- a forested hill and shoreline area known as Promontory Point, located to the southwest of the boat launch and in the south-central area of the peninsula;
- additional picnic shelters and isolated picnic tables; and
- park roadways, parking lots and pathways to support vehicular and pedestrian circulation and parking needs.

The 153-acre project site incorporates portions of many of the park facilities identified above. These include a small portion of the community campus and historic district; the two sports field areas; the tennis courts; the parking lot and access road serving Kite Hill and the beach area; a segment of the shoreline area between the swimming beach and the boat launch; two of the four picnic shelters in the park; and a significant portion of the park's vehicle and pedestrian circulation network, including approximately 1.4 miles of trails and pathways. The Sand Point Fields area has two baseball/softball fields overlapped by four soccer fields. The Sports Meadow has two additional baseball/softball field configurations but generally supports multiple field uses, including soccer and Ultimate Frisbee as well as unstructured or informal uses. Most of the acreage within the project site is currently unprogrammed space, including open vegetated areas and several non-historic buildings that housed the former Navy Commissary and associated functions.

Vehicular access to the project site is presently provided from Sand Point Way NE via NE 65<sup>th</sup> Street and NE 74<sup>th</sup> Street. NE 74<sup>th</sup> Street enters the Sand Point property at the site of the main gate to the former naval station. The street continues to the east for approximately 1/4 mile to a dead end near the Community Activities Center (Building 406). NE 65<sup>th</sup> Street travels along the southern edge of the project site and continues to the east to provide access to the public boat launch on Lake Washington, located in the southeast corner of Sand Point Magnuson Park. An on-site park roadway (Sportsfield Drive) extends north from NE 65<sup>th</sup> along the western edge of the existing sports fields, and connects with NE 74<sup>th</sup> Street. NE 65<sup>th</sup> Street becomes Beach Drive near the boat launch area, and extends north and northeast along the lake shoreline to a parking lot that serves the park beach area and Kite Hill, passing through the southeastern portion of the project site. A third internal park roadway branches north from Beach Drive into the central portion of the project site, providing access to a parking lot that serves the existing tennis courts and sports meadow area.

Marked and unmarked parking spaces for approximately 1,220 cars are located in four main existing parking lots and along roadways on the project site. A total of approximately 3,000 parking spaces are provided within Sand Point Magnuson Park as a whole (see **Section 3.12 Transportation** and **Appendix D** for further information on the existing parking supply).

Eleven existing buildings or other structures associated with the former naval station are present on the project site (see **Section 3.11 Historic and Cultural Preservation** for additional discussion of existing structures and their significance). The former Navy Commissary and Exchange complex in the southern portion of the project site accounts for five of these buildings and the vast majority of the square footage contained within the 11 existing structures. These five buildings are to be demolished in the future to make space available for other uses, as will two small, vacant outbuildings near the southwestern corner of the site, according to the direction of the Final Sand Point Reuse Plan. The remaining structures include two former munitions bunkers south of Kite Hill that are used by the Department of Parks and Recreation for storage, and two former Navy restroom facilities near the Lake Washington shoreline that have been adapted for park use.

Approximately 26.3 acres, or 17 percent, of the 153-acre project site are currently covered with impervious surfaces, distributed as follows:

<u>Feature</u>	<u>Acres</u>
roadways	4.7
parking lots	17.1
trails/walkways	0.7
buildings/structures	2.8
courts	1.0
Total	26.3

The project site is currently served with the full range of standard utilities, including electricity, natural gas, water, drainage and wastewater, telephone, and cable television. Many of the utility infrastructure systems were constructed at the time the naval station facilities were originally developed and were antiquated or failing at the time of the final Sand Point land transfer (City of Seattle, 1996). Several major utility system improvements were undertaken in the late 1990s to support the needs associated with the Reuse Project.

The zoning classification for the project site is Residential Single Family 7200 (SF 7200), which allows single-family residences, parks and playgrounds (see **Section 3.7 Land and Shoreline Use** for more detailed discussion). A portion of the project site, along the site's western boundary, is in the Sand Point Overlay District. This District establishes specific development standards for the site, emphasizing public use and access to the shoreline. The 200 feet extending inland from the shorelines on site is designated Shoreline Conservancy Management (CM) Environment in the City's Shoreline Master Plan. Recreational uses are generally permitted in the CM environment.

## **2.2 DESCRIPTION OF THE PROPOSAL**

### **2.2.1 Overview**

The site plan for the proposed project is graphically represented in **Figure 2.2-1**. More detailed drawings for the proposed action are provided in **Appendix A**. The proposal generally includes development of a sports field complex, a wetland/habitat complex, a drainage system, and a circulation system. These features would replace the existing resources in the affected section of the park. There are numerous habitat and natural areas located in other portions of the park that are not a part of this proposed project. Those areas would remain and continue to be nurtured and maintained through park management activities. The guiding concept for the proposal is to integrate the physical features and functions of all of the project components. Specifically, the proposal includes:

- 11 sports fields with all-weather surfaces and field lighting systems;
- a sports meadow, accommodating up to 4 additional fields, that would have a natural grass surface but would not be lit nor have permanent sports fixtures;
- removal of 6 existing tennis courts, to be replaced with approximately 14 new courts as part of an adjacent project;
- an inline-skate hockey surface, basketball courts, volleyball courts and an open lawn flex-space;

**Figure 2.2-1**  
**Site Plan, Proposed Action**  
**(11 x 17 graphic)**

- a wetland/habitat complex of approximately 65 acres with an open-water lagoon connection to Lake Washington, with amenities (signage, gathering areas) to support educational programming, located between the existing swim beach and the boat launch;
- a total of approximately 991 parking spaces, including 867 spaces with security lighting;
- three building complexes to house restrooms, concession stands and maintenance facilities for the sports field, sports meadow and habitat areas;
- a covered educational pavilion to support the educational use of the wetland/habitat complex;
- reconfiguration of NE 65<sup>th</sup> Street within the park boundary and two interior park roadways;
- a pedestrian trail system through the sports fields and around the wetland/habitat complex, with some of the trails designed to encourage walking enthusiasts and to support cross-country running competition; and
- extension, relocation and replacement of existing utilities as necessary.

**Table 2.2-1** provides a summary of land uses by acreage for the proposed action. For reference and comparison, corresponding data are included for the existing conditions, and the lesser-capacity alternative (see **Section 2.3**) and the no action alternative (see **Section 2.4**).

The characterization of the surface features of the project site shown in **Table 2.2-1**, as supported by the corresponding sketches in **Appendix A**, is intended to provide a basic quantification of the extent of the primary areas on the site. This is not presented as a rigorous cover-type classification of the site, but represents the approximate extent of specific features rather than precise delineations. Additional explanatory notes are summarized as follows:

- The acreage figures in **Table 2.2-1** for wetland/habitat complex correspond to the shaded areas indicated on the wetland/habitat complex sketches in **Appendix A**. These sketches illustrate the approximate limit of the wetland/habitat complex and reflect an attempt to quantify the primary areas of the complex. The habitat limits and acreage on the no action sketch (and the existing conditions column of the table) reflect an interpretation of the existing wetland and upland areas on the site that are likely to provide the most benefit to wildlife; there currently is no designated or managed habitat area within the project site. The vegetation community type sketches in subsequent **Figure 2.2-2** and in **Appendix A** provide additional detail on the planned cover types within the wetland/habitat complex.
- The park, lawn and planting category in the table, and the corresponding sketches in **Appendix A**, represents a catch-all category that includes all non-programmed lawn and planting areas outside of the wetland/habitat complex. Some of the acreage in this category, particularly in the transition between the sports fields and the primary wetland/habitat area, would probably be similar in appearance and function to cover types within the adjacent wetland/habitat complex.

**Table 2.2-1**  
**Project Site Land Use, by Alternative (in Acres)**

Use	Proposed Action	Lesser-Capacity Alternative	No Action Alternative	Existing Conditions
Wetland/Habitat Complex	65.1	61.6	54.1	54.1
Park, Lawn & Planting	28.68	35.68	49.56	50.7
Athletic Field Surfaces	37.0	32.1	21.6	21.6
<i>All-Weather Synthetic</i>	22.0	5.9	0.0	0.0
<i>Natural Turf</i>	15.0	26.2	21.6	21.6
Buildings	0.25	0.25	0.04	2.8
<i>New</i>	0.21	0.21	NA	NA
<i>Existing</i>	0.04	0.04	0.04	2.8
Roads	4.6	5.3	4.7	4.7
Courts (impervious)	0.37	1.37	1.0	1.0
Paths	8.6	8.0	1.3	1.3
<i>Soft Paths</i>	3.9	3.7	0.6	0.6
<i>Hard Paths (impervious)</i>	4.7	4.3	0.7 <sup>2</sup>	0.7
Parking	8.7	9.0	21.0 <sup>2</sup>	17.1
Project Site Total <sup>1</sup>	153.3	153.3	153.3	153.3
(Impervious Surface Total)	(18.62)	(20.22)	(27.44)	(26.3)

<sup>1</sup> The project site total acreage for all four conditions is based on the acreage within the project limits for the proposed action, for ease of comparison among alternatives. The lesser-capacity alternative would actually involve work within a reduced acreage, while the no action and existing conditions cases do not have true project limits.

<sup>2</sup> The former Commissary and adjacent buildings would be demolished in this case, but no other uses have been proposed for these sites. The slabs under these buildings are assumed to remain, and that acreage has been classified as "parking."

Management of site drainage has been a continuing challenge in the development and operation of Sand Point Magnuson Park, particularly in the central, eastern and southeastern sectors of the park that encompass this project. While the proposed wetland/habitat complex and sports fields/courts have their own strong merits, the development needs for these actions also provide the opportunity to address the drainage challenges on the site.

Creation of a demonstration project with a variety of wetland types and enhanced upland habitats would require movement of a large volume of soil (including soil removal in some specific locations) and extensive reorganization of existing site drainage patterns. The results would provide for a collective urban wetland environmental education opportunity, along with enhanced upland habitat areas and organized pedestrian access routes in appropriate areas to provide for greater citizen enjoyment.

The sports facility construction would also require large amounts of subgrade material (soil, sand and gravel) to build the understructure for the 15 proposed athletic fields. Both the artificial-turf and natural-turf fields would require excellent drainage systems to provide the desired function and support the proposed level of use.

Therefore, combining these prime park elements as an integrated project (even in the alternative scenario) in which most (if not all) of the soil graded during project construction remains in use on the site is an attractive solution. Integrating the wetland/habitat, sports fields and drainage aspects of the project would provide a variety of benefits, including reduced needs for trucking material through off-site neighborhoods, and use of land sculpting and vegetation plantings to soften the sports field edge and serve as pedestrian walkways.

### **2.2.2 Sports Fields**

The athletic facilities proposed for this project would make Sand Point Magnuson Park a first-class sports facility for residents of northeastern Seattle, and to some extent the broader city and the surrounding region, for both programmed and unstructured recreational sports activities. The proposed facilities are to be of premier quality for the user, and to accommodate the limited spectator groups typical of recreational sports events. Facility maintenance would be integral with the design to sustain the high standard of quality over the life of the facility.

The sports field component of the project includes a total of 15 athletic fields of various sizes and types, with additional recreation opportunities and facilities integrated into the site design. The distribution of the proposed fields by type of use is as follows:

- 4 fields in a redeveloped natural-turf “sports meadow” area that could be configured in a variety of field orientations for a variety of uses, including both structured and unstructured athletics and community functions;
- 4 full-size soccer fields (which could also accommodate other sports such as ultimate Frisbee and lacrosse);
- 1 Mod (youth) soccer field;
- 2 baseball/adult slow-pitch softball fields (for which the outfield areas could be used for youth soccer practice outside of the baseball season);
- 3 little league baseball/fast-pitch softball fields; and
- 1 rugby field.

The proposal includes synthetic, all-weather surfaces and field lighting for the latter 11 fields on the list, i.e., all fields except for the four “sports meadow” multiuse fields at the north end of the project site. The proposed layout of the fields is largely according to the adopted Magnuson Park Concept Design, with the natural-turf fields located in the general area of the existing sports meadow and the new synthetic-surface fields clustered along the western edge of the project site along Sportsfield Drive. Specific field layout has been adjusted from the master plan in response to additional information on specific site elements. These field locations would combine with the proposed circulation system to better facilitate user access. The clustering of fields along the western and northern sides of the site, which are also the higher-elevation portions of the site, would facilitate site drainage, primarily by surface means, to the proposed wetland/habitat complex. All of the fields, both natural- and synthetic-surfaced, would have permeable surfaces with under-drain systems daylighting into drainage conveyance swales that would ultimately direct water to the wetland/habitat complex.

Facility characteristics and design guidelines for the sports fields component of the proposed action are summarized below by type of facility; additional detailed drawings are included in **Appendix A**.

### **Natural-Turf Fields**

The existing sports meadow (the current Magnuson Park Fields) would be redeveloped and expanded somewhat under the proposed action to improve the drainage and function of this facility. The sports meadow is proposed as a natural-turf area with contiguous grading in a single plane for flexibility of use and layout. While programmed primarily to accommodate regulation-size adult and youth soccer fields, the sports meadow is intended to be a multipurpose area allowing additional activities including ultimate Frisbee, youth soccer practices and community events. The sports meadow has been sized to accommodate four full-size soccer layouts configured in a minimum of three possible orientations. The layout of the sports meadow would allow periodic shifting of field locations to reduce use impacts to the turf and allow recovery of high-activity areas on the field. All goals and other support equipment in the sports meadow would be portable, and the sports meadow would not have permanent field lighting systems.

Design guidelines for the natural turf in the sports meadow include the following:

- All natural-turf field areas would include imported sand materials with a total depth of 12 inches. This includes 6 inches of coarser base sand and 6 inches of root-zone sand. The root zone sand would be a blend of between 85 to 90 percent clean sand and between 10 and 15 percent organic material. The organic component of the root-zone sand would be either processed compost or peat. This blend would provide a balance between effective drainage and efficient use of water and nutrient applications.
- The natural-turf fields would also include automatic irrigation systems with central control. The irrigation systems would be designed to apply water uniformly across the entire field area.
- The natural-turf fields in the sports meadow would be seeded with a blend of perennial rye grass and Kentucky blue grass. This blend has provided the best performance for natural turf athletic fields in the Puget Sound region. The perennial rye grass is shade tolerant and performs well in a climate with limited sunlight and cool temperatures. The Kentucky blue grass provides good wear resistance and recovery during the growing season. The fields in the sports meadow would require up to a 1-year establishment period between seeding and the first scheduled events on the fields.

### **Synthetic-Turf Fields**

The remaining five soccer fields plus the baseball/adult slow-pitch fields, little league/fast-pitch fields and rugby field would all have synthetic surfaces. All of the synthetic-surfaced field areas would drain vertically. Each field would include a subsurface drainage system and a permeable aggregate base. The permeable aggregate base would include 8 inches of a base-course aggregate and 2 inches of a top-course aggregate. Both materials would be comprised of crushed rock with limited amounts of fine particles, to allow for efficient drainage. The top-course material would provide a final leveling course to achieve tight surface tolerances that typically range in deviations less than ¼ inch in 10 feet. Other specifications concerning field surfaces and support facilities that are common to all of the proposed synthetic-surfaced fields include the following:

- The synthetic-turf field areas would include some permanent lines and markings installed with inlaid or tufted-in sections of colored turf. The surfaces would also be compatible with temporary painted lines and markings for alternate uses or special events.
- Proposed fencing is limited to ball control fencing behind soccer goals, and typical safety fencing and backstops for the baseball and little league fields. Additional netting would be used above fencing in critical safety areas adjacent to the backstops. All fencing and backstops would be chain link with black-powder coating. All fencing would have concrete transition/mowing strips.

Additional design guidelines specific to the respective types of fields are summarized below.

### **Soccer Fields**

All soccer fields outside of the sports meadow would have a resilient in-filled synthetic turf surface. The synthetic surface on the soccer fields would extend to the edge of the runout area. Asphalt paving would be provided for user access, maintenance access, and bleacher pads. All full-sized soccer fields would be 345 feet (115 yards) by 225 feet (75 yards) in dimension. The Mod soccer field would be 280 feet (93.3 yards) by 185 feet (61.7 yards). All runout areas would be 10 feet on the sideline and 20 feet on the endline. All goals on these soccer areas would be stationary. Ball control fencing would be constructed behind each permanent soccer goal location, and would be designed in an arcing form reflective of the military hangar architecture that once dominated the field site.

### **Baseball/Softball Fields**

The baseball/adult slow-pitch softball fields would have synthetic-turf infields and outfields. Portable mounds would be used for youth baseball. Ten-foot warning tracks would be provided at all field edges. Left- and right-field distances would be 325 feet from home plate, and center field would be 370 feet. Backstops would be vertical and covered with a resilient material to reduce the sound level from balls striking the backstop. Bullpens and covered dugouts would be included. Asphalt paving would be provided for user access, maintenance access, and pads for modest bleacher structures.

Little league/fast-pitch softball fields would also have synthetic-turf infields and outfields. Portable mounds would be used for little league baseball. Ten-foot warning tracks would be provided at all edges. The outfield fence distance would be 225 feet from home plate. Backstops would be vertical and covered with a resilient material to reduce the sound level from balls striking the backstop. Bullpens and covered dugouts would be included. Asphalt paving would be provided for user access, maintenance access, and bleacher pads.

The baseball and softball infield areas would include sliding pits at home plate, the pitching area, and the bases. The sliding pits would include a stabilized infield mix to reduce migration of the infield material into the adjacent synthetic turf areas and to allow for a useable surface during wet weather conditions. The warning track surfaces would also be permeable, consisting of a red polyurethane and rubber wearing course (newly manufactured and pigmented rubber, known in the industry as EPDM) over layers of black reclaimed rubber (SBR) and pea gravel bound with a polyurethane binder. For ease of construction, this would be installed over the same permeable aggregate layers and the synthetic turf surfacing.

The outfield areas of the baseball/softball fields would be used for youth soccer practices during periods when these fields were not scheduled for baseball or softball use.

### **Rugby Field**

The rugby field (Field 15) would have a synthetic-turf surface extending to the edge of the runout area. Asphalt paving would be provided for user access, maintenance access, and bleacher pads. The rugby field dimensions would be 425 feet by 225 feet. The runout areas would be 10 feet on the sideline and 20 feet on the endline. The goals would be stationary.

### **Other Field Uses**

The design of the synthetic-turf fields is intended to facilitate their use for alternate sports activities or special events, in addition to the programmed uses described previously. Activities other than the designated uses that could be accommodated include ultimate Frisbee, mod soccer (e.g., on full-size fields), soccer practice (e.g., on the baseball/softball fields) and rugby.

### **2.2.3 Sports Courts and Related Facilities**

In addition to the athletic fields, other outdoor recreational sports opportunities included in the proposal are as follows:

- 1 inline-skate hockey facility,
- 1 full-size basketball court,
- 2 half-size basketball courts,
- 3 sand volleyball courts,
- 1 competitive (high school and college-level) cross-country running trail, and
- 1 open lawn flex-space.

Design guidelines for these proposed facilities are summarized below, and are reflected on the drawings included in **Appendix A**.

Existing plans for other locations on the larger Sand Point site include a remodeled community recreation center in Building 47 and a proposed new tennis center, both located near the northwest corner of the project site. While these facilities are not part of the current proposal, planning for the drainage, wetland/habitat and sports field project has considered the coordinated development of the other sports facilities, to promote the creation of a single, first-class athletic facility at Sand Point Magnuson Park.

### **Sports Courts**

Inline-skate hockey would be played on an asphalt-paved surface adjacent to the parking lot to the north of the baseball fields. The inline hockey area would be surrounded by boards with chain link fencing on top to contain the hockey puck.

Basketball facilities are to be located between the rugby field (Field 15) and the wetland/habitat complex restrooms. The basketball courts are to include one full-length court and two back-to-back half courts. These courts are to have asphalt bases with acrylic-painted surfaces and markings.

Three sand volleyball courts are to be located to the west of the baseball fields. The volleyball courts are to be constructed with an 8-inch sand base with underdrainage, filled flush to the surrounding grass areas, and contained with rubberized edging material.

### **Cross-Country Trail**

A 1.5-mile cross-country running course loop would border the east edge of the athletic field complex, encircle the wetland/habitat complex and tie into the existing Lake Washington shoreline walkway. The trail would then follow the north edge of Kite Hill and return along the east edge of the sports meadow. The surfacing for this course would primarily be ¼-inch-minus crushed rock, with some segments of asphalt. The existing topography of Kite Hill and new variable grades would be incorporated into the course to provide challenge and variety to the course. This trail would be used by walking enthusiasts and recreational joggers the majority of the time. Special running events could start or finish in the open lawn flex-space (see discussion below) to be constructed to the south of the North Sand Point parking lot.

An alternate route trail including a connection to the North Sand Point parking lot and along Sportsfield Drive could be constructed as an option for the proposal. If developed, this would add another one-half mile to the course and allow for an expanded course.

### **Open Lawn Flex-Space**

An open lawn flex-space is proposed for a location along the western edge of the athletic facilities area. The flex-space site is located between two of the major parking lots in the athletic complex, where it could serve as a natural arrival and gathering space for those using the athletic facilities. It is intended to allow for programmed activities associated with sporting events, including the start and finish line for the cross-country running venue, as well as a site for sponsors and coordinators of tournaments to set up headquarters stations for specific events. This flex-space is intended to be an attractive lawn area for passive recreation when not being used for programmed activities.

## **2.2.4 Drainage System**

The drainage system for the proposed project is based on the following concepts:

- Because of the relatively flat topography on site, surface drainage is the preferred alternative for the conveyance of stormwater from the finished project.
- Surface conveyance of stormwater by sheet flow and through swales would make site drainage more apparent to site users and provide an educational opportunity to illustrate the drainage interrelationships of the sports facilities to the wetland habitats and Lake Washington.
- Regulation of water quality and quantity requires stormwater directed toward the wetlands to be pre-treated; the upland source of surface water would be critical for maintaining the wetlands on the site.

Following development, approximately 18.6 acres of the project site would be covered in constructed impervious surfaces, including parking lots, roadways, paved paths and buildings. This figure would represent a net reduction in constructed impervious surfaces of 7.7 acres under the proposal from existing conditions. Overall impervious surface area would increase under the proposal, however, because open water is also considered an impervious surface for stormwater modeling purposes. Approximately 11.5 acres of open water would be present on site during the summer (dry) months and approximately 16.5 acres of open water during the winter (wet) months.

The proposed stormwater control system would be designed according to the Washington Department of Ecology (2001) Stormwater Manual for Western Washington and the City of Seattle Stormwater Treatment Technical Requirements Manual. In general, the proposed system would convey stormwater from the northern, eastern and western perimeters of the project site to Lake Washington through five basic drainage “chains” that include several different drainage systems (See **Section 3.2 Water** and **Appendix B** for a more detailed description of the proposed stormwater control facilities). Stormwater detention would not be required because the site drains directly to Lake Washington, a “Receiving Water Body” of the State of Washington. However, post-development peak flows would be reduced from existing conditions because of the proposed improvements, including the large area in athletic fields. Eighteen new ponds would be created as part of the project. Although the ponds would provide additional stormwater storage, they would not be detention ponds and would not be considered stormwater quantity control features.

Site drainage would primarily be accomplished via surface drainage because of the site’s flat topography. Constructed stormwater drainage control facilities would be used in selected areas. Stormwater emanating from on-site parking lots would be pre-treated through bioswales or filter strips prior to discharging into wetland ponds. Stormwater emanating from the artificial-turf field surfaces would be treated through the infiltration system engineered as part of the field; no water quality treatment of that water is required prior to its discharge to wetland habitat areas. The five drainage chains would collect and convey stormwater through swales/ditches and/or pipes to the wetlands/ponds. Water from the bioswales would enter a wetland until the water surface elevation in the wetland is equivalent to the outlet elevation. The water would then overtop the pond outlet and continue through the chain to the next wetland. Ponds that are full would function as flow-through facilities, because water entering the pond would displace an equivalent amount of water discharging through the pond outlet. Stormwater coming from the fields and parking lots to the west of the wetland/habitat area would flow through pre-treatment and then through multiple wetland complexes before final discharge into Lake Washington. The water from these upland sources would be a critical component in creating viable hydroperiods for the proposed wetland habitats on the site.

Several different facilities and systems would provide water quality treatment at the site. These systems would include biofiltration swales and filter strips, wetponds, and water quality vaults, which would be located between the stormwater sources and the wetland habitats to assure that only pre-treated water would enter the habitat areas. The natural-turf athletic fields would provide filtration of precipitation through sand/gravel field bases to the subdrainage pipe system. Water quality treatment would not be required for the synthetic turf athletic fields, because the surface material would be inert and would not be fertilized. However, the fields would provide water quality treatment through the same filtration as described for the natural turf fields.

## **2.2.5 Wetland/Habitat Complex**

### **Needs and Opportunities**

The proposed wetland/habitat complex is intended to address the following needs and opportunities:

- To provide a unique urban educational demonstration of how to link necessary urban drainage systems with a variety of wetland/habitat types into an integrated-environmentally sensitive drainage system.
- The overall habitat value of Sand Point Magnuson Park can be improved by developing or enhancing additional habitat to complement existing on-site natural areas such as Promontory Point, the north and west slopes of Kite Hill, the adjacent shoreline area north of the Fin Art display and south of the shore access portion of the off-leash area, and habitat and wetland areas on the National Oceanic and Atmospheric Administration property north of the park.
- Providing for both people and wildlife may require some degree of spatial separation and understanding various types and goals for various wetland/habitat areas. Assessing seasonal use patterns of targeted wildlife users and human users may result in a better understanding of temporal separation and/or areas of overlap inherent at the site.
- Undeveloped shoreline aquatic habitat is scarce and patchy along Lake Washington. Sand Point Magnuson Park provides an opportunity to create needed, high-quality, near-shore habitat while maintaining existing beach areas and associated recreation opportunities.
- The existing habitats on-site are limited in the functions they provide for wildlife due to the young age of most of the vegetation (less than 30 years old); the severely compacted condition of the soils, which limits plant growth and biologic activity; and the lack of structural and species diversity due to the early-successional stage of the vegetation. There is an opportunity to create far greater habitat diversity and allow natural succession to be assisted and directed towards a variety of habitat types that would not naturally form on the severely altered site.
- Existing habitat values are reduced by essentially unrestricted human access to the entire site. Consequently, there is an opportunity to provide increased habitat and wildlife protection by directing human uses to the most appropriate locations, while increasing physical complexity and niches within the habitat zones.
- The existing wetland areas are technically wetland but they provide low functions and values due to the short duration of inundation for most of them, the lack of species diversity or habitat complexity, the lack of adjacent mature upland habitat, and the harsh soil conditions. Proposed habitat improvements would extend duration and depths of inundation, increase soil tilth, and create opportunity for species diversity and complexity.

The wetland/habitat component of the project would feature approximately 65 acres of upland and wetland habitat. **Table 2.2-2** summarizes the proposed distribution of upland and wetland vegetation types for the proposed action and the alternatives. The wetland habitat complex would include approximately 31 acres of wetlands in six different community types, plus 34.1 acres of upland forest (not including approximately 8 acres of upland forest in the “park, lawn and planting” category).

The created and/or enhanced habitat would include a diverse array of wetland and upland systems designed in early successional stages, and anticipating mature system complexity. The types of wetland proposed are driven by their anticipated hydroperiods. Water sources from precipitation, groundwater,

stormwater runoff and overland flow would drive a broad range of hydrogeomorphic wetland types. There would be depressional, flow-through, seasonally-wet marshes, permanent open-water ponds fed by groundwater, saturated marshes that may have no long-term inundation, and a permanent open-water lagoon created as an embayment of Lake Washington. The wetlands and associated uplands are designed to provide habitat for a diversity of wildlife species including fish. In addition, the habitat complex is designed to offer access for formal and informal education and interpretation opportunities. The aquatic habitat component of the project would create new habitat for endangered fish, amphibians, macro-invertebrates, aquatic mammals and other aquatic and terrestrial species.

**Table 2.2-2**  
**Vegetation Community Types, by Alternative (in Acres)<sup>1</sup>**

<b>Vegetation Community Type</b>	<b>Proposed Action</b>	<b>Lesser-Capacity Alternative</b>	<b>No Action Alternative</b>	<b>Existing Conditions</b>
Upland Forest	42.5	39.2	27.5	27.5
Wetland Subtotal	31.0	32.2	22.5	22.5
<i>Wet Meadow (40-50%)<sup>2</sup></i>	3.6	5.5	8.4	8.4
<i>PEM-Palustrine Emergent</i>	13.2	13.2	3.1	3.1
<i>PSS-Palustrine Shrub/Scrub</i>	0.0	0.0	2.1	2.1
<i>PFO-Palustrine Forest</i>	1.8	1.8	2.7	2.7
<i>POW/PEM/PAB complex</i>	9.8	9.3	0.0	0.0
<i>PEM/PSS complex</i>	1.3	1.3	6.2	6.2
<i>POW/PEM complex</i>	1.3	1.1	0.0	0.0
Vegetation Community Total	73.5	71.4	50.0	50.0

<sup>1</sup> The vegetation community total includes some upland forest acreage included in the “park, lawn and planting” areas (on **Table 2.2-1**) that would be interspersed with or adjacent to the wetland/habitat complex.

<sup>2</sup> Wet meadow acreages represent estimates of the area within the mosaic of wet meadow and upland habitats that actually exhibits wetland characteristics. Under existing conditions, 40 percent of the total wet meadow acreage is assumed to be wetland. Because the proposed action and lesser-capacity alternative would provide increased water volumes and depth to this area, 50 percent of the wet meadow acreage is assumed to be wetland for these cases.

To improve overall habitat function in the Park, it is proposed to create upland habitat linkages across the site linking remnant upland forest patches in the interior to a forested zone surrounding the proposed lagoon, and linked to the upland forest of Promontory Point to the south. Aquatic habitat and wetland values for wildlife habitat are currently restricted by the amount of viable diverse upland habitat accessible to terrestrial species; it is proposed to create a complex pattern of aquatic and upland habitats across this site, linked to the shoreline of the lake. Upland habitat types would include mixed deciduous/coniferous woodlands, native shrub zones and upland meadows dominated by grasses. In addition, structural complexity would be added to the upland and wetland habitats by placement of brush piles, large woody debris, and snags throughout the site. Upland areas would have to be early successional stages, however, long-term stewardship would allow ‘under-planting’ of young conifers to facilitate successional stages. The overall goals of the habitat plan are to:

- Increase the diversity of upland and wetland habitats available across the site;
- Connect upland and wetland habitats from a portion of the park shoreline on Lake Washington to the upland forests of Promontory Point and the off-site corridor of the Burke-Gilman Trail;
- Increase habitat function and complexity within the Park for native species of wildlife;
- Provide opportunity for passive recreation, and formal and informal education through a series of primary and secondary trails, while maintaining a ‘protected’ interior habitat core;
- Increase habitat access and quality for native fish, waterfowl, aquatic mammals and other aquatic species along the shoreline of the Lake;
- Create habitat configurations, hydrologic patterns, and vegetation community types reflective of existing conditions, with anticipation of future successional stages; and
- Anticipate construction opportunities, long-term maintenance responsibilities and stewardship opportunities to provide options for citizen and student involvement in the park and its habitats.

### **Wetland Hydrology: Site Drainage Patterns**

The sources and movement of water across the site are fully described in the Preliminary Storm Drainage Report (Haluschak, 2001) provided in **Appendix B** of this EIS. Proposed drainage patterns are summarized below, because understanding the pattern of water movement across the site is critical to understanding the hydrologic conditions of the proposed wetlands and their functions.

On the west, north and south sides of the project area are proposed ponds whose primary purposes are twofold: to provide water quality improvement for surface waters generated from impervious surfaces or sources of likely high sediment yield, and to collect surface waters from bioswales into concentrated locations before those cleaned waters are allowed to move into the wetland/habitat complex inside the habitat portion of the site. In addition to a water quality and a ‘staging’ function, these ponds would provide *de facto* wetland habitat functions.

As described in the storm drainage report, there are five drainage ‘chains’ or sequences envisioned across the site.

1. The first sequence, across the south end of the site, would collect parking lot and road runoff from the southwest corner of the project area into a water quality (WQ) pond. Flows from there would proceed east into a series of WQ treatment ponds that parallel the access road into the site. The treatment ponds are linked by a series of bioswales on the west side of the access road, flowing north. These flows, now cleaned, would seep through a leaky berm under the access road and primary trail into a collection pond southwest of the lagoon (pond #5, Figure DR-5, **Appendix B**). Flows from the collection pond would seep through another leaky berm and then into the lagoon.
2. The second sequence is located immediately north of and parallels the first sequence. Water from the artificial-turf sports fields would be collected and directed into the southern sub-set of flow-through marshes. These marshes are planned as shallow impoundments (12 to 18 inches deep) with broad, unrestricted outlets so that they would fill with precipitation and runoff, then overflow into the next marsh in the series. It is assumed that all the marshes in this flow-through complex would be filled by late fall/early winter in normal rainfall years. Water flowing through the marshy pools would be directed eventually as overland sheet flow into the southern Promontory Point pond (pond #9, Figure DR-5, **Appendix B**), located

- immediately north of the access road at the southern edge of the project area. Flows from this pond would overflow through an unrestricted weir towards the north, into the next pond (#10), and from there northward into a pond crossing under the road (pond #11, Figure DR-5, **Appendix B**), which would drain via a leaky berm into the lagoon.
3. The third sequence would collect stormwater from the Sportsfield Drive parking lot, pre-treat it through bioswales, bring in runoff from the artificial-turf softball fields, and discharge it to the central sub-set of the marshy pools. As described in sequence #2, above, these marshy flow-through pools would drain from one to the next, eventually discharging flows through unrestricted outlets to drain to the south into the northern Promontory Point pond (pond #10, Figure DR-5, **Appendix B**). The outlet of the northern Promontory Point pond is described above in sequence 2.
  4. The fourth chain or sequence starts in the northwestern corner of the project area, where flows from the parking lots would run through bioswales and be collected in a water quality pond south of the Junior League Playground (pond #12, Figure DR-5, **Appendix B**). Flows from this water quality pond would be directed southeasterly into a pond immediately north of a created berm. Flows would exit this pond via a leaky berm designed beneath the landscape berm, allowing the waters to enter the northern sub-set of the marshy pools. Water would move through these pools as described above. Water leaving the pools would be directed eastward toward the largest open-water pond (pond #17, Figure DR-5, **Appendix B**), immediately west of the access road and northwest of the lagoon. Flows from this large year-round pond would seep through a leaky berm under the access road and into the northern reaches of the lagoon.
  5. The fifth sequence is the most northern on the site. Flows from the natural-grass sports meadow fields would be collected in a water quality pond in the north meadow area (pond #14, Figure DR-5, **Appendix B**). Flows from this pond would be directed to the east into an existing wetland complex located at the southern toe of Kite Hill. Flows from this wetland complex would be directed to the east/southeast toward the access road. At the intersection of the access road and the paved Bunker Path, these flows would be redirected towards the south, under the Bunker Path, and into the seasonal pond (pond #16, Figure DR-5, **Appendix B**), north of the permanent open-water pond, west of the access road. Flows from this pond would head south into the permanent pond, and then into the lagoon as described above in sequence 4.

### **Wetland Habitat Types**

The proposed wetland/habitat complex would include a range of wetland types with a variety of water sources, thereby increasing the diversity of seasonal habitat types. The wetlands have been designed to respond to the source and seasonality of available water on site, and to maximize habitat considerations within the landscape context of Sand Point Magnuson Park. Providing a variety of wetland/habitat types is also designed to greatly enhance the educational opportunities of the site. The proposed wetland types are indicated schematically in **Figure 2.2-2**. They are described in more detail below, moving counter-clockwise around the site starting from the west.

**Figure 2.2-2**  
**Vegetation Community Types, Proposed Action**  
**11x17**

## **Marshy Pools**

The proposed marshy pools form a 5.6-acre series of shallowly-inundated emergent marsh and mudflat habitats that would receive water from the collection ponds and the bioswales to the west. The marshy pools are designed to fill with water entering through leaky berms. The pools (from 12 to 18 inches in depth) would overflow through broad, unrestricted outlets into one or more pools downslope. By late fall or early winter, the entire complex of marshy pools would fill and overflow toward the south and east. In low-precipitation years the ponds would still likely fill (given the large contributing area compared to the small volume of their overall storage capacity), although they might dry out earlier in the spring. The areas between each wetted pool would be planted with native shrubs and trees in order to create a highly complex mosaic of wet herbaceous and upland woody habitat.

The goals and objectives for the marshy pool complex are to:

- create shallowly inundated/saturated depressions that pond to no more than 18 inches in depth;
- create breeding amphibian habitat by creating shallow, stable water levels between mid-winter and late spring;
- create appropriate native shrub and woodland habitat in clusters surrounding the shallow pools to provide the upland forest component required for viable populations of many native amphibian species of the Puget Sound lowlands;
- create extensive ‘edge’ or ecotone complexity on the site for maximum habitat values for birds, small mammals, and amphibians;
- attempt to create seasonal mud-flat habitat for invertebrates and shorebirds in the upper series of the pools, which would dry up earliest every growing season;
- improve habitat functions provided by existing wet meadow habitat by increasing the diversity of hydrologic regimes, increasing vegetative and structural complexity, and creating inaccessible habitat; and
- provide education opportunities for comparing/contrasting habitat functions and species diversity in multiple wetland types.

Access to the marshy pools would include a secondary trail that crosses through the southwestern corner of the complex, weaving through the complex on top of the upland berms separating the pools of the complex. In addition, one of the elevated berms on site would provide a visual overlook opportunity along the western margin of the marshy pool complex. The primary trail would form the western boundary of the marshy pool complex, providing visual access between the higher-use athletic fields and the more passive habitat zone.

## **Promontory Point Ponds**

These two proposed wetlands, equaling just under 3 acres in size, are located in the southern-most portion of the habitat area, in the vicinity of the existing Commissary (Building 193). Groundwater is at or within 1 foot of the surface in this location during the winter and the water level fluctuates only slightly during the year (AMEC Earth and Environmental, Inc., 2000). In addition to groundwater, the southern pond would receive a consistent input of fresh water from the U.S.G.S. fish research facility (off-site to the south) of 0.9 cfs (cubic feet per second) year-round. The ponds would be excavated to a depth of 6 to 8 feet, with shallow sloping benches around the pond margins. The ponds are situated to protect the

existing black cottonwood stands, which would remain and surround much of the shoreline of the new ponds.

The goals and objectives for the Promontory Point ponds are to:

- create systems that retain an open-water component year-round;
- create a wetland complex with at least three wetland classes (open water, aquatic bed, and emergent) and adjacent upland forest;
- provide waterfowl wintering and spring migration refuge habitat (away from the lake), and possibly brood rearing habitat for some human-tolerant waterfowl species;
- provide invertebrate and shorebird habitat, as the ponds may have early fall mudflat habitat;
- create diverse wetland habitat types adjacent to upland black cottonwood forest and shrub communities for high structural diversity and habitat mosaics for a variety of wildlife species; and
- create a ‘launching’ place for formal K-12 education access to the habitat site, with easy trail access, strong visual access, and expansive open-water and emergent marsh habitat near the primary trail system.

Waters from the southern pond would flow northeastward into the northern pond through an unrestricted outlet, meaning that no storm-driven water fluctuations would occur. From there, flows would be directed through swales into a pond to the north that extends under the access road. Water from that pond would seep through a leaky berm into the lagoon.

The southern Promontory Point pond would be the primary site for initial contact for education and interpretive tours to the habitat area. A small shelter is proposed overlooking this pond on the west side, with easy access to restrooms immediately to the west. In addition, the primary access trail would surround this wetland on two sides and cross two arms of the wetland, to provide ease of access for education opportunities. The northern Promontory Point pond is designed to be set back into the more protected interior portions of the habitat zone.

## **Lagoon Area**

The proposal to develop a lagoon is derived from the desire to re-create, in some small part, the complex historic habitat elements that were once present along a portion of Lake Washington shoreline. Too many parameters have irrevocably changed to ever attempt to effectively recreate the former Mud Lake on this site. However, with the appropriate design parameters, the proposed lagoon is intended to replicate some of those historic functions, while also providing an excellent opportunity for human interaction with habitat restoration and shoreline habitats. In addition, the lagoon would provide an important visual connection between Lake Washington and the wetland/habitat area inland from the lake.

The lagoon is sited in the proposed location for a variety of reasons. First, this location of the park, in existing conditions, has the least amount of effective shoreline habitat. To the north of the proposed lagoon, it would be more difficult to enhance habitat value in the shoreline area near the heavily-used swim beach and dog off-leash area. To the far south in the park, the beach bank reaches heights of over 6 to 8 feet, making creation of a lagoon in that location more costly and complex. In addition, the far south end of the park is adjacent to residential properties, and there is good upland habitat in that zone that should not be sacrificed for creation of a lagoon. The existing boat launch is located immediately south

of the proposed lagoon site, and it is used predominantly in the summer months, when fish use in the near-shore area is less common. Although the presence of the active boat launch reduces the overall habitat value of this lagoon location, the proposed site remains the best alternative location along the entire park beachfront. In addition, the proposed lagoon location is also roughly the former location of the Mud Lake outlet.

The lagoon is designed with a forebay that is deeper than the interior channel, in order to catch and settle wave-borne sediment particles. The opening into the inner lagoon would be approximately 35 to 40 feet wide, and crossed by a pedestrian bridge located among the only young native conifers present in this area of the shoreline. The pedestrian crossing would allow visual access down into the water, across into the inner lagoon, and out across Lake Washington. It is proposed to surround the lagoon on the south and west sides with a mixed-canopy forest, and to make the southern promontory at the mouth of the lagoon also forested to maximize habitat benefit and shading. The northern arm of the lagoon is designed to have a pedestrian trail and a sweeping view of the lake and Mt. Rainier in the distance.

The lagoon would receive flows from all of the wetland complexes located west of the swim beach access road, and it would be excavated to a depth sufficient to intercept the groundwater year-round. The size of the lagoon has purposefully been kept relatively small to reduce the surface area subject to thermal heating. The lagoon design reflects the goal to keep water temperatures as cool as possible through constant input of groundwater and lake water, and by retaining as much as possible of the existing trees to the south along the convoluted southern shoreline.

The goals and objectives for the lagoon area are to:

- create a strong visual and physical connection between the interior wetland/habitat area with Lake Washington;
- increase shoreline habitat with a high degree of overhanging and emergent vegetation for the benefit of fish;
- provide refuge habitat for rearing chinook salmon within shallow water areas when fish are present (winter to early spring and also spring to mid-summer).
- avoid creating habitat for the predators of salmonid fry (no large boulders or woody debris are proposed within the lagoon);
- provide shoreline substrates (e.g., sands, mud, pea gravel, with no armoring, rip-rap or cobble) and vegetation (e.g., shallow emergent, overhanging woody shrubs and trees) suitable for juvenile fish and other wildlife;
- create browse habitat for aquatic mammals in emergent shelves and along the buffering of the shoreline (i.e., soft-stemmed species for muskrat, woody species for beaver);
- provide pedestrian access across the lagoon opening to facilitate views into the lagoon and across the lake, and assure the pedestrian crossing allows a continuous movement corridor with 'punch-outs' for stationary pedestrians;
- maintain a physical barrier between the lagoon and the other wetland habitats on the site to reduce opportunity for non-native invasive species to move from the lagoon into the interior of the site; and
- allow small watercraft access into the forebay lagoon but preclude watercraft access into the interior of the lagoon to maintain maximum habitat benefit in the more protected interior reaches.

The lagoon would eventually develop a substrate high in organic and fine sediment material, thereby limiting its benefit for some species of fish. However, it would create a permanent open-water shoreline with convoluted margins that would be beneficial to a variety of wildlife species. In particular, it is assumed that dense installations of willow, cottonwood and other browse species would be well used by beaver in the Lake Washington system as a new food source.

All water generated from north or west of the habitat zone would eventually be directed eastward into the lagoon. There are no proposed direct surface water links between the waters of the lagoon and the other wetland habitats to the west of the swim beach access road. This is to preclude easy access for non-native invasive species from the lake up into the newly created habitats. Although species such as bullfrogs and purple loosestrife seem to move about with ease, the design is intended to slow down the colonization of the invasive species. In addition, the leaky berms are intended to preclude the movement of non-native fishes (bass and carp in particular) from the lagoon ‘upstream’ into the wetland habitats.

### **Seasonal Wetland Complex**

Northwest of the lagoon and across the access road is the location for a complex of wetlands that would be driven by both groundwater and surface runoff. These would be shallow seasonal open-water wetlands, with some aquatic bed habitat and emergent marsh around the margins. The lower pond (furthest south) would be deep enough to tap into groundwater throughout the year. The upper two ponds would not tap into groundwater at all, but would be fed from runoff in their surrounding basins as well as water flowing from the Kite Hill sedge-meadow wetland located northeast of the bunkers.

Because the upper two ponds would be driven by runoff, there is the potential that they might dry out late each summer, although the stormwater modeling for the project does not predict this would occur in normal precipitation years. The wetlands would be inundated by mid-winter, creating shallow standing water (less than 3 feet). Depending upon rainfall, they might dry out by late summer, exposing substrates for migrating shorebirds in the fall. These wetlands are not anticipated to provide the highest-quality amphibian breeding habitat on the site, although they should provide excellent invertebrate and wading bird habitat. It is likely that they would become dominated by emergent vegetation over time, becoming classic ‘marshes.’

The existing young black cottonwood stands south and east of the proposed seasonal wetlands would be maintained to provide for edge complexity, upland woodland habitat for the amphibious species, and shading to benefit water temperature. These forest stands would be augmented with native understory and coniferous species to provide complex native forest habitat over time.

The goals and objectives for these wetlands are to:

- create a range of hydroperiods in the complex;
- create shallow vegetated marsh habitat with only seasonal standing water evident;
- provide adjacent forest/woodland habitat to support various life stages of several types of wildlife including birds, amphibians, small mammals, and bats;
- create an expansive view from the swimming beach access road into portions of the interior of the habitat zone; and
- provide trail access to shallow vegetated marsh habitat.

Waters from this wetland complex would flow from the Kite Hill sedge meadow into the upper wetlands, then down one to the next, eventually to drain into the lagoon through a leaky berm created under the swim beach access road.

### **Kite Hill Sedge Meadow**

This wetland complex is present immediately northeast of the paved access path to the two former munitions bunkers, just southwest of the swim beach parking lot. It is a sedge-dominated wetland with some spirea present. The wetland was formed because surface runoff from Kite Hill is impounded behind the paved trail. It is proposed that flows from the expanded sports meadow fields to the northwest would be directed into the north meadow water quality pond, and from there into the sedge meadow. Existing flows exit the wetland through in a shallow ditch leading towards the Lake, and empty into the lake via a buried culvert. It is proposed to block the flows from exiting to the Lake, and instead direct the flows to the southwest, under the paved bunker path to drain into the seasonal wetland complex, and from there into the lagoon as described above.

The results would be to increase inundation depths and duration in the existing sedge/spirea wetland, thereby benefiting the sedge vegetation. A small berm would be required along the north edge of the paved access trail to the bunkers, to preclude overtopping and flooding of the trail. The enhanced wetland would provide increased habitat function for invertebrates and amphibians.

The goals and objectives for the sedge meadow area are to:

- increase the duration and depths of inundation in the wetland;
- direct water from the wetland into additional wetland complexes on the site prior to discharging to Lake Washington; and
- expand the area of wetland and change the vegetation dominance to predominantly sedges

### **Interior Existing Emergent Marshes**

In the interior portions of the habitat area is an area of approximately 9 acres that would not be regraded as part of the proposed action. In existing conditions, the area is a mixed habitat of emergent wetlands (with seasonal inundation), wet meadow (with winter saturation), upland meadow and native shrub/tree thickets. In existing conditions, this area receives water primarily from precipitation and via a shallow swale that crosses the site from the north, then drains towards the southeast. In the proposed conditions the area would receive sheet-flow runoff from the marshy pool complex to the west and from the area to the north through a leaky berm. It is expected that wetland characteristics would develop over a larger area based on the increase in volumes of water introduced to it. In addition, this interior area contains the existing small, closed-depression emergent wetlands scattered across the area, including the wetland currently known as “Frog Pond.” Care has been taken in the design of the marshy pool complexes to minimize alterations to the estimated contributing basins to the key existing wetlands, to assure that they would not be subjected to significant changes in their hydroperiods.

It is assumed that future conditions would result in more extensive wet meadows and marshes throughout this area, with vegetation shifting towards more wet-tolerant species such as Baltic rush and sedges

instead of wet meadow grasses. In addition, it would be expected that wet-tolerant native species of willows and black cottonwood would establish over time and expand from existing thickets.

The goals for this area are to:

- increase the duration of inundation and saturation to facilitate the establishment of wet-tolerant native vegetation;
- reduce the presence of non-native invasive plant species (graminoids, herbs and woody species); and
- increase habitat values by increasing inundation and changing flooding regimes, reducing the presence of invasive species, increasing plant diversity and vegetative complexity.

### **2.2.6 Site Vehicular Access and Parking**

The proposal includes site access, circulation and parking improvements to support all components of the proposed design. Roadways and parking lots are identified on **Figure 2.2-1**, introduced previously. Additional detail is reflected in the drawings included in **Appendix A**.

Under the proposal, primary vehicular access to the project site would be provided from NE 65<sup>th</sup> Street. This entrance would be modified and NE 65<sup>th</sup> Street would be reconfigured as an entry boulevard. The typical profile of the boulevard would consist of, from south to north, a 10- to 12-foot wide paved bikeway, a 5- to 8-foot wide planting buffer, a roadway with two 12-foot-wide lanes, a 20-foot wide planting buffer, a 9-foot-wide primary pedestrian way with a soft edge (see **Section 2.2.7** for additional discussion), and additional planting buffer and drainage swale area.

Secondary vehicular access to the project site would continue to be provided from NE 74<sup>th</sup> Street, which would connect directly with the reconfigured parking lot in the northwest corner of the project site. The proposed action does not include modifications to NE 74<sup>th</sup> Street.

On-site roadways would remain along the western edge of the sports fields (Sportsfield Drive), as well as near the Lake Washington shoreline (Beach Drive). These connector roadways would be reconfigured to improve circulation and to accommodate proposed parking and wetland improvements. The reconfigured Sportsfield Drive would run west of the sports field complex and serve as a primary north-south circulation route connecting NE 65<sup>th</sup> Street with NE 74<sup>th</sup> Street, providing access to the three major sports field parking lots as well as an alternate access to the historic district. The typical profile for this road would include, from west to east, two 12-foot wide travel lanes, a 20-foot wide planting buffer, a 9-foot-wide primary pedestrian way with a soft edge (see **Section 2.2.7** for additional discussion), and additional planting buffer and drainage swale area. The similarly reconfigured roadway to the shoreline would continue to provide access to the public boat launch, located in the southeast corner of Sand Point Magnuson Park, and to the swimming beach on the eastern shoreline of the park.

The proposed action would provide parking for approximately 991 cars within the limits of the project site. There would be a net loss in available parking spaces under the proposal, primarily because some roadways that now provide road-shoulder parking would be removed or reconfigured. New or modified parking lots included in the proposal would provide sufficient parking for sports field users, and the park as a whole would continue to have ample parking. Proposed parking would be distributed in five primary

areas on the project site (see **Figure 2.2-1**). (In addition, existing parking lots elsewhere within the park but outside the project site would remain.) The future parking capacity within the project site would be distributed as follows:

<u>Parking Area</u>	<u>No. of Spaces</u>
1 – North Sand Point	235
2 – North Fields	158
3 – Sportsfield Drive	209
4 – South Fields	265
5 – Kite Hill/Beach Drive	<u>124</u>
Total, Project Site	991

The North Sand Point parking area is the location of an existing parking lot, just south of the Community Activity Center (Building 406). The existing lot would be reconfigured and resurfaced under the proposed action. The North Fields, Sportsfield Drive and South Fields facilities all represent new parking areas. The 124 spaces at Kite Hill/Beach Drive represent expansion of the existing lot and creation of 34 angled parking spaces along the east side of Beach Drive. The existing space for parking along both shoulders of Beach Drive would be eliminated through reconfiguration of the roadway.

Portions of the new and reconfigured parking areas would be surfaced with asphalt paving. Lower-use portions of the parking areas would be surfaced with reinforced grass paving, to reduce heat gain and runoff generated by impervious surfaces. Reinforced grass paving would be used in the parking lot sectors located furthest from programmed activities, so these spaces would only be used under peak parking conditions. Landscaping in parking lot islands and border areas would provide shading for a minimum of 30 percent of the surface area, to limit heat gain. Wherever possible, stormwater would drain from the parking areas by sheet flow across asphalt-paved surfaces into reinforced grass paving areas and to an adjacent drainage swale. The proposed plan includes minimal use of piping and catch basins for parking lot drainage. The proposal includes security lighting for the four parking lots adjacent to the sports fields; the Kite Hill/Beach Drive parking area would not be lit (see **Section 2.2.9** for lighting details).

Two vehicle access gates would be installed at points on NE 65<sup>th</sup> Street to control traffic flow to the sports fields as well as to other areas served by Beach Drive. One gate would be located at the intersection of NE 65<sup>th</sup> Street and Sportsfield Drive, and would allow park staff to secure the South Fields parking and Beach Drive after field activities were completed for the evening. The second gate would be located just beyond the east entry to the South Fields parking lot, allowing Beach Drive to be secured while the sports fields and adjacent parking lots remained in use and accessible.

### **2.2.7 Pedestrian Circulation/Trail System**

The proposed project includes a system of several types of pedestrian pathways and trails for various uses, specifically:

- primary pedestrian ways,
- secondary pedestrian ways,

- a cross-park trail,
- a cross-country running trail, and
- a bikeway.

The five types of trails would include a total of approximately 39,000 lineal feet (7.4 miles) of surfaced trails. **Figure 2.2-3** shows the layout of the proposed trail system (see **Appendix A** for additional detail) while cross-sections of the various trail types are provided in **Figure 2.2-4**. The key components of the trail system are described below.

- **Primary Pedestrian Way** – As the name indicates, these are intended to be the primary circulation routes for pedestrians within the completed project site. They would serve the heaviest traffic areas and would employ two possible profiles. The first profile is an entirely paved path (usually asphalt, though concrete would be used in selected locations) ranging in width from 6 to 9 feet. These paths would be located in the areas of highest activity, specifically among the sports fields and parking areas. The second profile is a primary path with a soft edge. These primary paths would consist of 6 feet of paved area, with an adjacent 3-foot wide shoulder of “soft” crushed-rock surface for running and walking. These paths would be located along the NE 65<sup>th</sup> Street entry boulevard and around the western periphery of the project site, where running activity is most likely to occur. The primary pedestrian way connecting the NE 65<sup>th</sup> Street entry to the sports fields would meet the accessibility standards of the Americans with Disabilities Act (ADA).
- **Secondary Pedestrian Way** – These are smaller-scale pedestrian trails, averaging 6 feet in width, making connections between other circulation elements and within portions of the wetland/habitat complex. Secondary pedestrian ways would typically be “soft” crushed-rock paths, while elevated wooden walkways would be used within the more sensitive areas. Secondary pedestrian ways within the wetland/habitat complex would be designed and managed exclusively for pedestrian use, with bicycles prohibited.
- **Cross-country Trail** – This trail would provide a 1.5-mile cross-country running course that circumnavigates the wetland/habitat complex. The trail would be 12 feet in width and surfaced with crushed rock. Where the cross-country trail runs adjacent to existing paved pedestrian areas, such as along the lakeside promenade and a segment of the cross-park trail, it would consist of a 6-foot wide crushed-rock path. The cross-country trail would be available for walking, jogging and service vehicle access when not in use for scheduled events. It would form a perimeter loop from which smaller paths originate to access portions of the habitat complex. The loop is also proposed as a bypass to intercept pedestrian traffic and discourage “cut-through” pedestrian traffic in the habitat complex.
- **Cross Park Trail** – The cross park trail would be a 9-foot wide paved path providing a direct connection from the more-developed western portion of Sand Point Magnuson Park to the lake shore and swim beach. The route for this trail generally follows the route of the existing cross-park trail, which would be reconstructed or reused as necessary. Providing a clear and logical circulation route between these elements would allow excess parking demand at the Kite Hill/Beach Drive parking lot to be diverted to the North Sand Point Fields parking lot during times of peak swim beach usage.

**Figure 2.2-3**  
**Pedestrian Circulation Plan, Proposed Action**

**Figure 2.2-4**  
**Cross-sections of Access/Circulation Routes**  
**11 x 17**

- Bikeway – A paved bike trail ranging in width from 10 to 12 feet would be constructed adjacent to NE 65<sup>th</sup> Street/Beach Drive, to provide improved bike access from the NE 65<sup>th</sup> Street park entry to the swim beach.

## **2.2.8 Service and Maintenance Facilities**

### **Proposed New Buildings**

As part of the proposed project, three new service and support complexes would be constructed to serve park users and complement the enhanced park uses. One or two buildings in each location would be constructed to serve the sports field area, sports meadow area, and habitat area. Each building complex would consist of men's and women's restroom facilities, an electrical supply room, and janitorial/mechanical space. In addition to these basic services, individual buildings would contain other uses that respond to the needs for their specific location. The architectural character of each building complex would relate to its location with respect to adjacent uses and specific programming issues, while maintaining some prototypical elements that allow for efficient construction and maintenance. In addition to the proposed new buildings, some existing structures on the project site would remain and continue to be used.

#### **Sports Field Area**

Two buildings would be constructed at the west-central edge of the project site, just north of the Sportsfield Drive parking lot, to serve the playfield area (see **Figure 2.2-1**). These buildings would be located near the middle of the field area, immediately adjacent to Fields 7 and 11 (baseball and little league fields). The buildings' design would incorporate baseball park features, including exposed metal trusses and large overhanging metal roofs. Brick veneer would also be used as a reference to the existing historic district to the west.

The easternmost field-area building would house a restroom. It would also offer an enlarged janitorial/mechanical room and an additional auxiliary restroom that could be used to double either the men's or the women's restroom capacity during large tournaments. The westernmost of the two buildings would include an electrical room, an equipment storage room to serve field maintenance crews, and a concession space and prep kitchen. Each building would be approximately 25 feet by 40 feet in size.

#### **Sports Meadow/Children's Playground Area**

One new building would be constructed in the northwestern portion of the project site, to serve the sports meadow area (see **Figure 2.2-1**). This building would be located along the cross-park trail, near the turn-around/drop off area east of the existing children's playground, and would also serve playground users. The building would be approximately 30 feet by 60 feet in size and contain a janitorial mechanical room, electrical room, restroom, concession cart storage, and associated covered area and counter area. The building's form and character would relate to the former aviation use of the site, with metal roofing and siding and exposed steel supports.

## **Wetland/Habitat Area**

Two buildings would be constructed on an upland location in the south-central portion of the project site, primarily to serve the wetland/habitat complex (see **Figure 2.2-1**). The buildings' design would emphasize natural colors, forms and materials in response to its setting. In addition to restroom, electrical supply and janitorial uses, the westernmost of the two buildings would contain a covered area for congregating. This building would be approximately 25 feet by 45 feet in size. The easternmost building would serve as an annex to support education programs. This building would contain a covered space, lunch area, kitchenette, and tool/equipment and storage room. This building would be approximately 35 feet by 55 feet in size.

## **Existing Buildings**

In addition to the three restroom/service structures included in the proposed action, four existing structures within the project limits for the proposed action would remain on the site and would be incorporated into the future programmed uses. These structures and their uses are summarized as follows:

- The existing restroom facility to the southeast of the sports meadow would remain as is and would primarily serve users of the sports meadow fields and visitors to the wetland/habitat complex. The restroom is a concrete structure excavated into the bank of an existing low mound.
- An existing restroom building near the Lake Washington shoreline, located between the boat launch and the main beach area, is to remain and would be integrated into the plans for the wetland/habitat complex. The site of this building is very close to the proposed lagoon off of the lake, making this an ideal location to complement interpretive and educational activities oriented to the wetland/habitat complex. The restroom building has underused space that could function as an educational annex, in support of programs operated out of the wetland/habitat area service facility.
- Two existing earth-covered bunkers (Munitions Bunkers 1 and 2; see **Section 3.11 Historic and Cultural Preservation** for additional discussion) are to remain in their present location adjacent to the cross-park trail, just south of Kite Hill. The proposed action includes no modifications to the bunkers themselves. Because the earthen mounds created around the bunkers provide elevated vantage points on a relatively flat site, however, an open-air viewing platform would be constructed on the top of each mound. One platform would be oriented toward views of the interior of the wetland/habitat complex, and the other would be oriented toward Lake Washington.

## **2.2.9 Lighting Systems**

Lighting of the 11 synthetic-surfaced sports fields, the parking lots and roadways, and certain pedestrian ways would be provided under the proposal. **Figure 2.2-5** illustrates the areas within the project site that would be covered by the lighting systems for both the proposed action and the lesser-capacity alternative. The lighting systems for the fields, parking lots and roadways would supply the minimum amount of light necessary to meet safety standards for those use areas.

**Figure 2.2-5  
Limits of Lighting**

## **Sports Fields**

The sports field lighting would be designed to a Class IV lighting level, as prescribed by the Illuminating Engineering Society of North America (IESNA) standard RP-6. Class IV is the lowest of the four light levels described in RP-6. The design level would provide an average light level at the playing field surface of 20 to 30 foot-candles, depending upon the specific requirements for each field. (A foot-candle is defined as a lighting level of 1 lumen distributed uniformly over an area of 1 square foot.) The characteristics of the lighting systems for the fields are summarized in **Table 2.2-3**.

The sports field lighting systems would consist of 1,000-watt floodlight luminaires (bulbs and fixtures) mounted to poles surrounding the fields. The poles would typically be 75 feet high, although some 65-foot and 85-foot poles would be used on the five baseball fields. The number of light poles per field would range from 6 to 10, based on the size and configuration of the field. All together, 80 light poles would be installed to serve the 11 synthetic-surfaced sports fields. Each light pole would support a light fixture array of 6 to 15 individual luminaires. Overall, the proposed field lighting design would involve a total of 640 luminaires.

**Table 2.2-3**  
**Sports Field Lighting Summary, Proposed Action**

<b>Lighting Characteristics</b>	<b>Fields 5 &amp; 6 (Soccer)</b>	<b>Fields 7 &amp; 8 (Baseball)</b>	<b>Fields 9, 10 &amp; 11 (Baseball)</b>	<b>Fields 12 &amp; 13 (Soccer)</b>	<b>Field 14 (Soccer)</b>	<b>Field 15 (Rugby)</b>
<b>Design Level</b>	25 foot-candles average maintained	30 foot-candles average maintained (infield), 20 foot-candles average maintained (outfield)	30 foot-candles average maintained (infield), 20 foot-candles average maintained (outfield)	25 foot-candles average maintained	25 foot-candles average maintained	25 foot-candles average maintained
<b>Luminaire Type</b>	Full Cutoff	Shielded Conventional	Full Cutoff	Full Cutoff	Full Cutoff	Full Cutoff
<b>Number of Luminaires</b>	104	152	120	120	64	80
<b>Pole Height</b>	75 feet above grade	75 & 85 feet above grade	65 & 75 feet above grade	75 feet above grade	75 feet above grade	75 feet above grade
<b>Number of Poles</b>	14	16	18	14	8	10

Source: Sparling, Inc., 2001

The pole heights selected allow use of the latest technology in shielding for athletic field lighting. The pole heights allow for the use of full-cutoff luminaires, which do not emit any direct light above the plane of the luminaires, on most of the fields. This reduces the amount of spill light delivered beyond the athletic fields and into the atmosphere. The selected pole heights also allow the use of steeper aiming

angles for the shielded conventional floodlights on the larger baseball fields. The steeper angles provide for more effective use of the luminaire shielding, which reduces the amount of glare as well as spill light. The lighting systems would incorporate full-cutoff, forward throw floodlights at all lit fields, except at the two larger baseball fields (Fields 7 and 8). The two baseball fields would use shielded floodlights. The lighting system for these fields would incorporate the latest available technology in reflector and shielding design in order to reduce the amount of light spillage and glare.

The lighting systems would be operated by an automatic programmable lighting control system. The lights for each field would be operated separately so that they could be turned off when the field is not in use. The system has the capability to be operated from a remote location.

Egress lighting would also be provided at the sports fields. This lighting system would supply a low lighting level to allow for egress from the fields after the field lighting has been turned off. The security lighting would consist of full cutoff luminaires mounted near the top of each sports field pole (to avoid the need to install additional poles specifically for the egress lights). The egress lights would be turned off shortly after the completion of scheduled field use each evening.

Consistent with standard policy and past practice at existing City athletic fields with lights, DPR has assumed for this analysis that the lighted fields at Sand Point would generally be scheduled for field use until 11 p.m. Therefore, field lights could be turned on as early as approximately 4 p.m. during the shortest days of the winter, and as late as approximately 8:30 p.m. during the longest days of the summer. Periods of light system use are expected to range from approximately 2.5 to 7 hours per day, depending on the season and the sky conditions on any given day. The actual hours of sports field light operation would be determined through the recommendation on this proposal forwarded to the Mayor by the DPR Superintendent, and/or the action taken on that recommendation by the Mayor and the City Council. The DPR Superintendent recently determined that light systems at four City sports fields (Ballard, Bitter Lake, Loyal Heights, and Miller) would be turned off at 10 p.m. to minimize neighborhood impacts. In those instances, the basis for the decision was that residential areas were immediately adjacent to the sports fields on two sides of the facility.

The light system for each field would be operated independently, so the number of light systems in use at a given time would correspond to the number of fields in use. Additional discussion of hours of operation for the sports field lights is provided in **Sections 2.2.14** and **3.9.5**.

### **Parking Lot and Roadway Lighting**

Parking lot lighting would be provided at the four parking lots serving the sports fields; the Kite Hill/Beach Drive parking area would not be lit. Roadway lighting would be provided along Sportsfield Drive. The lighting in the parking lot and roadway areas would provide a minimum of 0.6 foot-candles on pavement per the IESNA RP-20 and RP-8 standards, respectively. These lighting systems would consist of single full-cutoff luminaires mounted on 40-foot poles. Based on the size of the areas to be lit, parking lot and roadway lighting systems would require 37 poles and 36 poles, respectively.

### **Pedestrian Pathway Lighting**

Lighting would be provided along the ADA-accessible primary pedestrian pathway connecting Sand Point Way at 65<sup>th</sup> Street and the Sportsfield Drive parking lot (adjacent to Fields 11 and 12). This lighting

system would provide the minimum amount of light necessary to provide good visibility and meet safety standards for pedestrian use. The design lighting level would be 1.0 foot-candles horizontal average on pavement and 0.6 foot-candles vertical 5 feet above the path. The pathway lights would consist of single full-cutoff luminaires on 20-foot poles. This system would consist of 17 light poles.

#### **2.2.10 Other Utilities**

Water supply for building services and fire protection would be provided by extending services from the existing water line network/grid on the site. Water would be provided with new service connections for the five new buildings and field irrigation systems. Existing water lines that are located where new wetland/habitat complex and sports facilities are to be located would either be removed or relocated.

Sanitary sewer service for the five new buildings would be provided by extending service laterals from existing sewer lines to the buildings. There is an existing sanitary sewer system and force main (with lift station) that services the existing restroom facilities south of the sports meadow and near the beach area. The sanitary sewer system east and upstream of the lift station is located where the Beach Drive Pond would be located. A portion of this sewer system would be relocated and the lift station would be reconstructed as part of this project.

There are existing electrical and storm drainage lines and facilities located throughout the site that are no longer in operation. Many of these facilities have open vaults or spaces, without lids, which are potential hazards to people and animals in the area. These facilities would be removed, if located within the limits of project work, as part of this project.

#### **2.2.11 Construction Actions**

In general, construction activities for the proposed action would include clearing, site preparation, grading, installation of drainage and utility systems, construction of playing field bases and surfaces, construction of buildings and ancillary structures, and landscape planting. In certain locations, demolition of existing buildings would be required for site preparation.

In order to implement the proposal, the following existing buildings and associated paving would need to be removed: Navy Commissary (Building 193), Hobby Shop (Building 15), Building 308, Building 304, service bay (Building 345) and the (unnumbered) building west of the service bay. In total, approximately 7.7 acres of existing impervious surface area would be removed and approximately 18.6 acres of impervious surfaces would remain or be introduced.

The project site would be graded to generally drain from the western site boundary eastward toward Lake Washington (drawings DR-7 through DR-13 in **Appendix B** provide detailed information related to project grading plans). Grading would occur over the majority of the site in order to construct the sports fields and the wetlands/ponds. Constructing the wetlands/ponds would create approximately 400,000 cubic yards of excavated cut material and constructing the fields would require 370,000 cubic yards of fill. Approximately 60,000 cubic yards of base sand and/or gravel would need to be imported for construction of the sports fields. There would be an excess of approximately 30,000 cubic yards of excavated soil under the current grading plan. It is expected that this excess material would be reused in fine grading to support landscaping on the project site.

Plans for grading activity on the site have been developed with the objective of balancing the cutting and filling of appropriate subgrades within the project site, to eliminate the need to import material to the site or export material from the site. However, as noted above, construction of selected components of the proposed design would require importation of necessary construction materials. These imported materials include sand and crushed-rock base for the athletic fields as well as topsoils or topsoil amendments for the wetland/habitat complex. When construction needs require the importation of significant volumes of these materials, DPR would direct the construction contractor to transport these materials to the project site by barge, to reduce both the potential impacts of truck traffic on the adjacent neighborhoods and the cost to the project. (Based on existing knowledge of physical and regulatory conditions, DPR assumes that it would be feasible to import fill material by barge.)

New plantings would be introduced and existing planting retained consistent with the goals and objectives established in the Sand Point Magnuson Park Vegetation Management Plan (Seattle Department of Parks and Recreation, 2001). New plantings would be established on site in the wetland/habitat area and sports field area, around the parking lots, and along internal roadways. The proposed plantings for the wetland/habitat area would emphasize native species; where feasible and appropriate, existing non-native species in this area would be removed. As possible, existing native vegetation would be salvaged from the site prior to the onset of construction for reuse on site. In the sports field area the proposed plantings of trees, shrubs and groundcover would consist of primarily native species. Canopy trees planted in parking areas and along vehicular access routes could include non-native species due to the limited number of native canopy trees that can provide the required shading. These trees would be limited to deciduous non-invasive species compatible with the character and appearance of the native species.

### **2.2.12 Construction Phasing**

The Department of Parks and Recreation does not expect or intend to undertake all of the construction activities needed to implement the proposed action throughout the project site during a single defined construction period. Instead, the project plan involves constructing the drainage system, wetland/habitat area and sports fields and courts in a series of work phases. The intent of a phased-construction plan is to develop the most efficient sequence of development activities for the project. The sequence of construction phasing for the overall project and the entire site is based on the following criteria: location of specific activities on the site, construction access, constructability, priority for use of the finished facility, construction interdependence, and funding availability. It is intended that proposed Phases 1 and 2 would be constructed using funds already budgeted for Sand Point Magnuson Park improvements. The timing and specific scope of subsequent phases will be determined by funding not yet budgeted, and as such, it is more difficult to predict the extent of activity or time of implementation for these phases. In general, the phasing proposed in this plan is intended to identify the construction sequence for large-scale construction activities on the site, while allowing the flexibility to shift the phasing of smaller park elements in response to funding conditions.

The proposed phasing also reflects the complexities of construction planning for the proposed habitat complex/wetland area. The wetland/habitat complex will ultimately form a living ecosystem in which one element is dependent upon the existence and health of the other elements. Therefore, it will be necessary to provide interim erosion control and drainage facilities during initial construction activities to

ensure that later phases of construction activity do not compromise the health of portions of the habitat complex/wetland area already complete.

Based on the phasing criteria identified above, the proposed plan is for construction to occur in five major phases that could span 10 years or more. Under the proposed phasing plan, construction of the first phase could begin in 2003 and the last phase would begin in 2012. The broad outline of each planned phase is described below. **Figure 2.2-6** is a graphic depicting the proposed phasing of construction activity relative to the geographic areas of the project site.

### **Phase 1**

Phase 1 of the project would include renovation of the sports meadow as a logical first priority. The proposed sports meadow is a multi-use facility that would support scheduled athletic and non-athletic events, and would also be available for informal, unstructured use. It is isolated from most of the other components (existing and proposed) of the park, and construction here would not interfere with other existing park uses. Renovation of the sports meadow area would not be dependent on soil to be excavated in the construction of the wetland/habitat complex. Existing soil and rubble stockpiles on the Sand Point site (created in decommissioning of the former naval station facilities) could be used to supply material needed to form the sub-base required for the new natural-turf fields. The existing athletic fields along Sportsfield Drive would be kept in use while the sports meadow is renovated. Upon completion of Phase 1 construction, athletic activity would be redirected to the sports meadow while other existing fields were disturbed in subsequent phases. Drainage from the renovated sports meadow fields would be temporarily integrated into existing park drainage routes.

Specific timing for each construction phase is uncertain. The proposed plan is to begin construction of Phase 1 in the spring of 2003, with completion in 2004.

### **Phase 2**

Phase 2 is the first of two “mass grading” mobilizations that would excavate the proposed wetland/habitat complex and provide subgrades for the proposed synthetic-surfaced athletic fields. This phase would include construction of parking and road improvements, athletic fields, structures, and the Promontory Ponds and southern Marsh Ponds portions of the new wetland/habitat complex.

Excavation for the Promontory Ponds would provide fill for the subgrades for Field #7 (baseball/adult softball), Field #11 (Little League/women’s fastpitch softball), Field #14 (soccer), and Field #15 (rugby), which would be completed in this phase, as well as for the northern portion of the new Sportsfield Drive parking and the South Fields parking adjacent to NE 65<sup>th</sup> Street. Other athletic facilities that would be completed in this phase include the sand volleyball courts and the basketball courts. Selected service/support buildings would be provided at this time, including completion of the restroom and partial construction of the education annex at the wetland/habitat complex. Construction of the sports field service/support building would be completed in this phase if funding allowed. Subgrades for additional athletic fields would be prepared to the extent that this phase of habitat complex grading would allow, but the remaining fields themselves would be developed in later phases.

**Figure 2.2-6**  
**Phasing Plan, Proposed Action**

Temporary erosion control and detention facilities would be installed in these subgrade areas to ensure that only clean water entered completed portions of the wetland/habitat complex. Improvements to the NE 65<sup>th</sup> Street entry would be completed in this phase, as well as street improvements along NE 65<sup>th</sup> to the eastern edge of the South Fields parking lot, including a redesigned intersection with Sportsfield Drive. As part of these road improvements, the proposed bio-swales/water quality features adjacent to NE 65<sup>th</sup> Street and Beach Drive would be completed to provide “clean” water to the wetland/habitat complex. An interim surface connection to Lake Washington would be completed to convey water from the southern Marsh Ponds, the Promontory Ponds and the NE 65<sup>th</sup> Street water quality ponds to the lake.

The phasing plan is to begin construction of Phase 2 activities in 2004 or 2005.

### **Phase 3**

Phase 3 is the second and final of the two “mass grading” mobilizations. This phase would see construction of the northern and eastern portions of the wetland/habitat complex completed, including the northern Marsh Ponds, North Meadow Pond, the Beach Drive Ponds, and the Lake Washington lagoon. The existing tennis courts and adjacent parking lot would be removed in Phase 3. Material excavated through the completion of wetland/habitat complex sub-grading would be used to complete the sub-grade preparation for the remaining sports fields. Phase 3 would include completion of Field 5 (youth soccer), Field 6 (soccer), the North Fields Parking and the Sports Meadow/Kids Area restroom. The street improvements to NE 65<sup>th</sup> Street would be completed, in conjunction with the realignment of Beach Drive, and the swim beach parking lot would be expanded. Again, temporary erosion control and detention facilities would be installed in the areas that would be subgraded but not yet fully constructed, to ensure that only clean water entered completed portions of the wetland /habitat complex.

Construction in Phase 3 is expected to begin during 2007.

### **Phase 4**

Construction of the remainder of the athletic fields would occur during Phase 4. This would include Field 8 (baseball/adult softball), Fields 9 and 10 (Little League/women’s fast-pitch softball), and Fields 12 and 13 (soccer). The remaining portion of the Sportsfield Drive parking lot would also be completed during this phase.

Construction in Phase 4 is expected to begin during 2010.

### **Phase 5**

The largest single component of planned Phase 5 construction is the completion of the North Sand Point parking lot. In general, Phase 5 is a catchall phase that would provide completion of project facilities and amenities including additional landscaping, site furnishings, artwork, graphics and interpretive information, and building improvements to the existing service/support building near the proposed lagoon off Lake Washington.

Construction in Phase 5 is expected to begin during 2012.

### **2.2.13 Planting Plans**

Planting associated with the proposed project would be predominately native vegetation. Native plant species are preferred because they can more readily adapt to typical conditions found on the site, and provide better habitat for wildlife attracted to the wetland/habitat complex. Plantings would include named varieties of native species from Washington, Oregon, British Columbia, and Northern California that are hardy in the local Sand Point environment.

Some non-native canopy trees would be used in limited locations, including the 65th Street corridor, along Sportsfield Drive, adjacent to some of the athletic fields, and in parking lots. Use of some non-native tree species in these areas would form a transition from the built environment to the natural environment, and offer subtle diversity in terms of form, texture, and color. These trees would be limited to deciduous non-invasive species that are compatible in character and appearance with native species and would not compromise the acres of new native planting and native habitat associated with the development of the wetland/habitat complex. All coniferous trees, shrubs and groundcovers used would be native species. New plantings would be selected to both reflect the existing vegetation communities and increase their species diversity.

This approach is consistent with previous planning documents and reports prepared for Sand Point Magnuson Park. All have supported the use of native plants, while it appears that no documents have proposed the exclusive use of native plants.

### **Existing Site Vegetation**

The existing vegetation in the locations of the proposed sports field and wetland/habitat complexes is determined by the site's history as an air station and the Seattle Parks Department's ongoing maintenance to accommodate active and passive recreation activities. The area contains both upland and wetland habitats as described below. Where possible, existing site vegetation is to be retained, including native tree and shrub stands in the interior portions of the wetland/habitat complex.

Existing upland habitats found within the site include mowed grasslands; unmowed or infrequently mowed meadows; savannahs, or open expanses of unmowed grasslands with native or non-native trees and shrubs scattered across them (the most common existing upland habitat type); non-native shrub thickets; and deciduous woodlands with mixed closed or near-closed canopies. Existing upland habitats are often dominated by non-native species such as seeded grasses, blackberries and hybridized poplars.

The majority of the areas within the existing wet meadows and closed depressions on the site are typically dominated by various willows mixed with herbaceous species such as rushes, grasses and spiraea. The following wetland vegetation communities currently exist on the site: wet meadows, dominated by wetland species such as rushes and grasses; seasonal marshes characterized by long-term shallow standing water (most areas less than 8" deep) with rushes and sedges often ringed with sapling willows, black cottonwood and spiraea; shrub wetlands dominated by willow and spiraea thickets; and forested wetlands consisting of black cottonwood stands with little or no understory.

## **Proposed Planting and Design Principles**

### **Wetland/Habitat Complex**

An important goal in planting new native vegetation throughout the wetland/habitat complex is to increase diversity within upland and wetland habitats across the site. A first vital step would be the removal of existing non-native vegetation that can frequently take over native species and decrease diversity. Following excavation of several acres of proposed wetlands areas and the lagoon, a variety of native trees and shrubs would be planted to support new upland habitats and create diverse seasonal and year-round wetland habitats. These trees and shrubs would be chosen to reflect and enhance existing vegetation, respond to hydrologic conditions, and create new environments. New vegetation communities would in turn create habitat throughout the area for native wildlife species, thereby increasing wildlife diversity.

New vegetation communities throughout the wetland/habitat complex would not only create habitat diversity but are a component of the design intention to seamlessly integrate natural and urban forms into the landscape. Some planting patterns are designed to evoke the Park's prior history by emphasizing the grid of the former airstrip that ran through the wetland/habitat complex. New plantings would serve to connect the more urban areas to the west (Historic District, buildings, parking lots and sports fields) with the more natural areas of the wetland/habitat complex. Fingers of native vegetation would drift into the sports field areas, while marsh ponds and vegetation would dissolve from a pattern of geometric squares into loose organic shapes. Additional plantings of mixed forest canopy are proposed around the wetland and lagoon complexes to form a forested link between the shoreline at the lagoon and the upland forests of Promontory Point, located west of the boat launch area.

Existing native tree and shrub stands in the interior portions of the wetland/habitat complex would be preserved and expanded for increased habitat diversity, structural complexity, and summer shading of open waters. As possible, existing native vegetation designated for removal would be salvaged from the site prior to the onset of construction. These natives would be managed in a nursery for reuse in the planting phase.

### **Sports Fields Complex**

The proposed plantings of trees, shrubs and groundcovers within the sports field complex would consist of primarily native species. The parking lot trees identified on the proposed plans may include non-native species, due to the limited number of native canopy trees that can provide the functions required. Canopy trees are required to have a minimum branch height of 6 feet at installation to ensure viability until fully established, and ultimately provide large canopy coverage. These trees would be limited to deciduous non-invasive species compatible in character and in appearance with native species. These deciduous canopy trees would serve an important role in providing solar shading of paved surfaces to reduce heat islands.

Lawn areas would be provided among the fields and paralleling key circulation routes to allow activities of sports enthusiasts and fans to “spill” out of the immediate fields areas. These lawn areas would be interlaced with areas of upland planting extending into the fields area from the wetland/habitat complex. All proposed shrub and groundcover plantings would be native, consistent with the goals and objectives addressed in the planting overview.

## **2.2.14 Operations and Maintenance**

All facilities or resources developed through the proposed project would be operated and maintained by the Department of Parks and Recreation. Park-sponsored leagues, various league organizations and user groups and the general public would use the athletic facilities. The wetland/habitat complex within the park would be open and accessible to the public. In addition, more formal arrangements with education groups would be formulated to coordinate the use of the wetland/habitat complex for formal education for K-12 and university-level students. Stewardship and long-term maintenance of some aspects of the habitat restoration would be coordinated between Parks and interested citizen and community groups. The Parks Department would enter into agreements with various organizations, as appropriate, for use of the facilities and habitat resources.

General Park maintenance would include the mowing of lawn and meadow areas, at a frequency ranging from weekly to monthly based on location in the park and intensity of use, to be largely determined as a park operations decision. Maintenance of planting areas would include weed control, particularly of invasive vegetation in the native plantings that would dominate the site; mulching new plantings; replacing dead plant material; and managing the irrigation system. Paths would be maintained and cleaned to provide appropriate quality of surface to meet the programmed uses. Lighting in fields, parking lots and streets would require regularly scheduled re-lamping to assure adequate lighting levels are maintained. General maintenance would also include the repair of damaged property.

Maintenance needs for the natural-turf and synthetic-surfaced sports fields are summarized as follows:

- Maintenance of the natural-turf sports meadow would include managing the irrigation system, mowing fields at least once per week, and, if the mower did not collect the clippings, using a sweeper and/or vacuum to pick up clippings. The fields should be aerified a minimum of two times per year, preferably during restoration before application of amendments and seed, and again in the fall. The fields should be thatched a minimum of two times per year; this can best be accomplished during dry times of the year, summer and early fall. Fertilization for the field area should consist of applying a range of 6 to 8 pounds of available nitrogen per 1,000 square feet per season. It is suggested that a fertilizer supplying three (3) parts nitrogen, one (1) part phosphorus and two (2) parts potassium be used to make a complete fertilization. Formulas bearing this ratio of plant nutrients N, P and K are 15-5-10, 12-4-8, 10-2-4, 9-3-6, etc. It is best to apply about 1 to 1-1/2 pounds of available nitrogen per 1,000 square feet per application, repeating to achieve total amounts. Recommended months for fertilization are March, May, June, July, August and September, with November optional. It is recommended to apply 5 pounds of elemental sulphur per 1,000 square feet per year. This can be incorporated in combination of sulphur and sulphate fertilizer. For pH control, approximately 50 pounds per 1,000 square feet of dolomite limestone should be applied per year. This should be applied with one-half of the quantity in each of two applications, one in the fall and the other in the spring of the year. Problems such as weeds, insects and diseases would require attention when they occur. Sand Point Magnuson Park has been managed for many years as an herbicide- and pesticide-free park. Park maintenance staff have supported this commitment with respect to the proposed project, so use of such chemicals is not incorporated into future management plans. If an infestation created a need for chemical controls in the future, a broad-spectrum herbicide (that is, one containing such ingredients as

MCPP, Banvel-D and 2-4-DAMINE) is generally the best for weed control. Many different companies have formulations of materials with these ingredients.

- Maintenance of synthetic-turf fields would primarily involve cleaning. The fields would be cleaned every 1 to 4 weeks, using a sweeper to remove leaves, needles, and other debris, and a blower to remove larger leaves as required. Chewing gum residue would need to be frozen and chipped off of turf fibers as required. Sunflower seeds and other small debris that gets into the infill would need to be vacuumed. Every 2 to 4 months, as required, field surfaces would be brushed to bring up matted fibers, redistribute infill material and reduce infill compaction.

The primary maintenance tasks for the wetland/habitat complex would be removing invasive vegetation, mulching new plantings, replacing dead plant material, managing the temporary irrigation system, management of vegetated fences, elimination of undefined trails, and path maintenance. There would be an intensive level of maintenance during the first 5 to 10 years after construction. The maintenance requirements would significantly decrease after 10 years. The irrigation system would be abandoned after 3 years. Park staff and volunteers would perform the maintenance. Volunteers would primarily focus on invasive vegetation removal.

Access for maintenance equipment would be via the cross-country trail. The lack of plant density during the initial 5 to 10 years would allow full maintenance access throughout the non-fenced areas. Path maintenance would primarily be to supplement the surface material, addressing any drainage or settling conditions.

Ongoing maintenance activities for all natural areas in the park, including wetland habitats, removal of invasive thickets and upland forest regeneration, would follow the detailed guidelines and schedules outlined in the Sand Point Magnuson Park Vegetation Management Plan (VMP) (Seattle Department of Parks and Recreation, 2001b). The VMP outlines specific procedures for removal of invasive trees and shrubs, mowing frequency of meadow and turf/grass areas, monitoring for diseased or hazardous trees, and removal of invasive species from wetland and upland forest habitat areas. The VMP also specifies that any work within wetland habitats in the park be conducted to aid in species selection, monitoring frequency and performance criteria, all to be established on a project/site-specific basis.

With the level of investment in Sand Point Magnuson Park facilities and resources represented by the proposed project, annual costs for operations and maintenance would be considerably higher than the costs presently incurred for the existing uses within the project site. To accommodate the needs for ongoing operations and maintenance, DPR would set aside a portion of the funds allocated to these park improvements to support recurring annual costs.

One of the key operational issues associated with the proposed action concerns the hours of use for the lighting systems serving the 11 synthetic-surfaced athletic fields. Past practice at existing City athletic fields with lights has generally been to schedule field use until 11 p.m. DPR has assumed for this analysis that the lighted fields at Sand Point would follow the same operational pattern. (As noted in **Section 2.2.9**, however, the DPR Superintendent recently decided to limit sports field light operation to 10 p.m. at four City facilities and could recommend a similar operating schedule for the proposed action, as could the Mayor or the City Council.) Therefore, field lights could be turned on as early as approximately 4 p.m. during the shortest days of the winter, and as late as approximately 8:30 p.m. during the longest days

of the summer. Periods of light system use are expected to range from approximately 2.5 to 7 hours per day, depending on the season and the sky conditions on any given day.

The light system for each field would be operated independently, so the number of light systems in use at a given time would correspond to the number of fields in use. Hours of operation for the security, parking lot and roadway lighting systems would be similar, although these lights would remain illuminated for a short period following completion of the last scheduled games to allow safe egress from the sports field area.

## 2.3 LESSER-CAPACITY ALTERNATIVE

As required by SEPA, an alternative to the proposed action (other than no action) has been considered in this EIS in order to assess a range of possible environmental impacts. SEPA defines a reasonable alternative as an action that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation (WAC 197-11-440 [5]). An alternative development plan for the project site, which is termed the lesser-capacity alternative, is being analyzed in this EIS. This alternative has been defined to include actions that might reasonably attain or approach the objectives the City Council has identified for this project, but at a potentially lesser environmental impact.

A number of Draft EIS reviewers were critical of the configuration of the lesser-capacity alternative evaluated in the Draft EIS, which included 7 sports fields that would have lighting and artificial surfaces (compared to 11 such fields in the proposed action). Many of the review comments in this category maintained that the lesser-capacity alternative included too many lighted, artificially-surfaced fields and would therefore result in associated environmental impacts of nearly the same magnitude as the proposed action. In response to these Draft EIS review comments, the Department of Parks and Recreation has revised the composition of the lesser-capacity alternative for the Final EIS. The lesser-capacity alternative now includes only 3 fields that would have synthetic surfaces and would be lit, along with 7 nearby fields (plus a sports meadow area) that would have natural turf and would not be lit.

While this configuration for the lesser-capacity alternative has a similar footprint to the proposed action and includes nearly the same number of fields, it represents a significant reduction in sports field capacity because the larger number of unlit fields would support a smaller aggregate number of scheduled field hours. Overall, the lesser-capacity alternative would provide approximately half as much sports field capacity as the proposed action. In their evaluation of the proposal and alternatives, the decision makers will need to consider whether this alternative would satisfactorily address the proposal's objective for increased sports field capacity.

The lesser-capacity alternative that is analyzed in Chapter 3 of the Final EIS is graphically represented in **Figure 2.3-1**. As with the proposal, this alternative includes a sports field complex, a wetland/habitat complex, integrated drainage and a circulation system. Specifically, the lesser-capacity alternative includes:

**Figure 2.3-1**  
**Site Plan, Lesser-Capacity Alternative**

- 3 sports fields (rather than the 11 with the proposal) that would have all-weather, synthetic surfaces and would be lit;
- 7 new sports fields that would have natural-grass surfaces and would not be lit;
- a somewhat smaller sports meadow area, accommodating up to 3 soccer fields, that would have a natural grass surface and would not be lit;
- 6 existing tennis courts to remain, with approximately 8 new courts to be constructed as part of an adjacent project;
- basketball and volleyball courts;
- a wetland/habitat area of approximately 61 acres with an open-water lagoon connection to Lake Washington immediately north of the boat launch;
- a total of approximately 393 lit and 672 unlit parking spaces;
- retention of the existing sports meadow parking lot and access road;
- two new buildings (rather than the three with the proposal) to house restrooms, concession stands and maintenance facilities for the wetland/habitat complex and the sports fields;
- a scaled-down pedestrian trail system through the sports fields and around the wetland habitat area; and
- existing utilities would be extended and/or relocated as necessary.

The individual components of the lesser-capacity alternative are summarized in **Sections 2.3.1 through 2.3.7**. These discussions are abbreviated relative to the corresponding portions of **Section 2.2** because, in general, the respective components of the lesser-capacity alternative and the proposed action are quite similar. The following narrative focuses on the differences between the two alternatives, rather than repeating facility descriptions that would be the same for each alternative.

### **2.3.1 Sports Fields and Courts**

The athletic field component of the lesser-capacity alternative differs from the proposed action primarily with respect to the distribution of athletic fields by surface type and lighting. The lesser-capacity design calls for 2 to 3 natural-turf fields incorporated into the multipurpose sports meadow (compared to 4 with the proposed action), which is reduced in size to approximately its existing areal extent. (The actual field count in the sports meadow would be determined by the changing field layout intended to “rotate” the fields).

The proposed action includes 11 remaining fields (excluding the sports meadow area) along the western side of the project site. In comparison, the lesser-capacity alternative retains 10 of the fields included in the proposed action, with some shifting in general locations, dimensions and proposed uses. For the lesser-capacity alternative site plan, Fields 5 and 6 (youth and adult soccer) are shifted to the west, in place of the North Fields parking lot, and allowing a northwestern extension of the wetland/habitat complex. In addition, the lesser-capacity alternative eliminates one of the Little League/adult softball fields (Field 9) included in the proposed action, and includes a vegetated buffer area in the vacated space.

The primary difference in this case, however, is that 7 of the 10 fields in the sports field complex would have natural turf and would NOT be lit for night play. Compared to the proposed action, the number of synthetic, all-weather-surface fields is reduced to 3, including 1 full-size soccer field, 1 baseball/adult slow-pitch softball field, and 1 Little League/fast-pitch softball field. As with the proposed action, only

the synthetic-surfaced fields would be lighted for night play. Therefore, the lesser-capacity alternative would result in 3 sports field lighting systems, rather than 11 in the case of the proposed action.

The one full-size basketball court, two half-size basketball courts, three sand volleyball courts and the cross country course remain as parts of the sports facility component of the lesser-capacity alternative. However, this alternative does not include the inline-hockey facility and the open lawn flex-space identified in the proposed action.

### **2.3.2 Drainage System**

In general, the drainage system described for the proposed action (see **Section 2.2.4**) would also be incorporated into the lesser-capacity alternative. Surface drainage by sheet flow and through swales would still be the primary means of conveying stormwater from the finished project, and drainage flows would be directed through the wetland/habitat area as a critical water source for a variety of wetland types. The stormwater control system for the lesser-capacity alternative would likewise be designed according to the Washington Department of Ecology (2001) Stormwater Manual for Western Washington, and would convey stormwater from the northern, eastern and western perimeters of the project site through a series of drainage chains toward Lake Washington. The same types of facilities and systems would be used to provide water quality treatment for stormwater, including biofiltration swales and filter strips, wetponds and water quality vaults.

The primary difference related to drainage for the lesser-capacity alternative is that there would be 1.4 acre less wetland area (primarily of the marshy pool and open-water habitat types, as described in **Section 2.2.5**) and a larger area of retained impervious surface within the wetland/habitat complex, because the existing interior roadway and parking lot near the center of the project site would not be removed under this alternative. As a result, the volume of stormwater flowing through the project site would be slightly greater than estimated for the proposed action. In addition, the lesser-capacity alternative includes 10 natural-turf athletic fields and 3 synthetic-surfaced fields, compared to 4 natural-turf and 11 synthetic-turf fields under the proposed action. Additional water quality treatment measures would be needed for the additional natural-turf fields to account for the larger area subject to fertilization. These water treatment facilities are included in the plan to ensure water entering the wetland/habitat complex from the natural-turf fields would be “clean” before entering the wetland areas (drainage from the synthetic-turf fields in the proposed action would already be considered “clean”).

### **2.3.3 Wetland/Habitat Complex**

The design elements of the wetland/habitat component for the lesser-capacity alternative are essentially the same as the proposed action. The existing interior access road, tennis courts and parking lot would remain, however, thereby affecting drainage patterns and hydrology in a portion of the park. A larger area of the existing wet meadow would also remain, as a result of eliminating Field 9 from the proposal. The lagoon, the Promontory Ponds, the marshy pools and the seasonal wetland complex northwest of the lagoon remain consistent between the proposed action and the lesser-capacity alternative. Those features are described above in **Section 2.2.5**. The water quality pond located in the north meadow would not be created (because the sports meadow fields would not be expanded), therefore, there would be less water directed into the sedge wetland northeast of the bunkers and, ultimately, less water flowing southward into the seasonal marsh complex northwest of the lagoon. The seasonal marsh complex would

have a different hydrologic pattern, with less winter volume input resulting in earlier drawing down in the early summer and greater water fluctuations in entire complex over a water year. There would be a net increase of 1.9 acres of the interior emergent marsh/wet meadow habitat zone relative to the proposed action and a reduction of 0.7 acres of open-water/emergent marsh wetland complex. Overall, the lesser-capacity alternative would result in 32.2 acres of wetland, or 1.2 acres more than the proposed action. Leaving the interior access road, tennis courts and parking lot in place would require the site drainage to be designed so that sheet flow across the site would have to be more directed. Assuring that sheet flow did not collect on the west side of the interior access road might require that road to be reworked in places, to create leaky berms or some other method for assuring that surface water could pass through readily in appropriate locations. Redirecting surface flows might influence the extent of this interior marsh habitat type in future conditions.

### **2.3.4 Access, Parking and Circulation**

The lesser-capacity alternative would maintain similar vehicular access and circulation system as described in **Section 2.2.6** for the proposed action. The primary vehicular access point would also be a reconfigured NE 65th Street, and the NE 74<sup>th</sup> Street entrance would remain unchanged. Sportsfield Drive and Beach Drive would be reconfigured as discussed previously. The difference in vehicle circulation routes between the alternatives involves the interior roadway that currently extends north from Beach Drive to serve the central parking lot south of the sports meadow and tennis courts. This roadway would be removed with the proposed action, but would remain under the lesser-capacity alternative.

Several of the parking components described in **Section 2.2.6** for the proposed action would be changed for the lesser-capacity alternative. In summary, they are as follows:

- the North Sand Point parking lot capacity would be reduced from 235 (proposed) to 184 spaces;
- the proposed 158-space North Fields lot would not be constructed;
- the Sportsfield Drive and South Fields parking lots would be developed, as for the proposed action, providing 474 combined spaces;
- the existing 73-space parking lot at the end of Beach Drive would remain, but Beach Drive itself would be reconfigured to include 34 angled parking spaces (compared to approximately 170 spaces at present); and
- the 300 spaces in the interior parking lot and along the roadway to this lot would remain, whereas they would be eliminated under the proposed action.

Overall, the lesser-capacity alternative would provide a total of 1,065 parking spaces within the project site at the completion of project construction. This is actually a net increase in parking supply compared to the proposed action, primarily as a result of the retained interior parking lot and access roadway.

Because the lesser-capacity alternative would result in fewer athletic fields with lights for night play, there would be less demand for parking during evening hours. Consequently, the 184-space North Sand Point parking lot and the 209-space Sportsfield Drive parking lot are the only parking areas that would have security lighting under the lesser-capacity alternative. This compares to four lighted parking lots under the proposed action.

The pedestrian circulation/trail system for the lesser-capacity alternative would be similar to that described in **Section 2.2.7** for the proposed action, but would have somewhat less total trail distance (6.9 miles, compared to 7.4 miles for the proposed action).

### **2.3.5 Facilities and Utilities**

The lesser-capacity alternative includes two service/support building complexes that would also be developed under the proposed action; a new building to serve the sports meadow area would not be constructed. The locations and descriptions of these facilities would be as described previously in **Section 2.2.8**.

The lesser-capacity alternative includes lighting systems for 3 athletic fields, rather than 11 fields as for the proposed action. The characteristics of these sports field lighting systems would be as described in **Section 2.2.9**. The fields that would have lighting systems under this alternative include Field 7 (baseball/adult slow-pitch softball), Field 11 (little league/fast-pitch softball) and Field 12 (soccer). As indicated in **Table 2.2-3**, these 3 fields would require 21 light poles supporting 176 total luminaires. As noted above, only the northern and Sportsfield Drive parking lots would have security lighting under the lesser-capacity alternative.

The lesser-capacity alternative would require similar utility system modifications as the proposed action. The primary difference between the alternatives would be the need for less extensive electrical system modifications for the lesser-capacity alternative.

### **2.3.6 Construction Actions and Phasing**

Construction actions for the lesser-capacity alternative would be similar to those described in **Sections 2.11** and **2.12** for the proposed action. Demolition activities would be less extensive for the lesser-capacity alternative, because the interior parking lot, tennis courts and roadway would not be removed. Similarly, that portion of the project site would not be graded and revegetated to develop restored wetland/habitat areas.

The phasing plan for the lesser-capacity alternative would parallel the plan for the proposed action. Construction activity would occur in five phases, distributed geographically about the project site as indicated previously in **Figure 2.2-5**. The level and extent of activity in several of the phases would be somewhat less than under the proposed action, as a result of proposed features that are not included in the lesser-capacity alternative. Because this alternative would involve a lower overall project cost, it might be possible to accomplish all of the project construction activity in somewhat less time.

### **2.3.7 Operations and Maintenance**

The operations and maintenance program described in **Section 2.2.13** for the proposed action would likewise apply in general to the lesser-capacity alternative. The Department of Parks and Recreation would operate and maintain all of the facilities and resources developed through the lesser-capacity alternative, and would coordinate with various community groups on programmed use of both the sports fields and the wetland/habitat complex. Annual costs for operation and maintenance would be higher

than at present, although these costs would be somewhat lower for the lesser-capacity alternative compared to the proposed action.

There would be some minor differences in maintenance activities between the alternatives, such as a greater need for fertilizing and related natural-turf care under the lesser-capacity alternative. While fewer fields would be lit compared to the proposed action, the typical hours of operation for the sports field lighting systems would likely be the same as for the proposed action.

## 2.4 NO ACTION ALTERNATIVE

The no action alternative represents the most realistic expectation of future conditions on the project site if the proposal for the wetland/habitat complex, drainage system, and sports fields/courts were not implemented by the Department of Parks and Recreation. With the minor exceptions noted below, the existing conditions map presented as **Figure 2.1-2** is reflective of the no action alternative. More specific graphics applicable to this alternative are included in **Appendix A**.

Given the condition of the existing park facility, a few minimal improvements would be expected to occur within the project site absent the proposal. These would include major maintenance improvements to the drainage and irrigation system at the existing sports meadow in Magnuson Park. The former Navy Commissary facility, which includes five buildings at the south end of the project area, would be demolished regardless of the disposition of the proposed action. These buildings present a substantial security issue for the City. The parking areas at the commissary site would remain paved and open to general parking. The existing sports fields at Sand Point and the sports meadow would remain in their current condition. The currently undeveloped area east of the Sand Point sports fields and south of the existing tennis courts would remain unchanged. Minor improvements would be made to the existing pedestrian circulation system through the maintenance of trails. The existing parking would remain in its current configuration. Existing utilities would remain in place.

A decision not to implement the proposed action for drainage, sports fields and wetland/habitat development on the project site would have no effect on current, pending and planned projects for other locations at Sand Point Magnuson Park. **Section 2.6** provides a discussion of other projects outside the site for the proposed action but within the park that will be implemented under the direction of the Sand Point Reuse Plan.

In the no action alternative, the existing upland and wetland habitats that are present on the site would continue to go through natural successional patterns over time. If it is assumed that the hydrologic patterns would stay consistent (i.e., there would be no significant change in the volume or timing of water entering the site in a 'normal' rainfall year), then the existing vegetation communities would be expected to mature and become more complex with native species over time.

It is assumed that the amount and duration of shallow winter inundation and extremely poor soil conditions in existing conditions limit the establishment of diverse plant communities within the majority of the project site. It should be expected that woody shrubs and saplings would slowly establish in the existing grasslands as soils increase in their organic content. If left unchecked, Lombardy and white poplar might continue to colonize the grassy portions of the site, extending outwards from their existing points of establishment. In addition, native black cottonwood and red alder may continue to expand their

presence within the dry grasslands and also along the margins of the shallow seasonal marshes. As trees and shrubs become established, they change the growth conditions of the site by creating cooler, moister habitats. Over time, the mulch formed from their leaf drop increases soil humus content and water retention capabilities, resulting, in the long term, in soil development more appropriate for a broader range of native deciduous and coniferous trees.

It should be expected that, within 25 to 50 years, the majority of the open space portions of the site would be dominated by woody saplings and young and middle-aged trees, essentially forming a nearly closed canopy over large portions of the site. This in turn would shift the wildlife use to species more adapted to forest stands and closed-canopy habitats rather than open grasslands and savannah type habitats.

If the volume and timing of water entering the site did not change, there could be a change in the vegetation community types of wetlands found on the site, but one would not anticipate an outright loss of wetland habitat area. A loss of seasonal marsh habitat might be anticipated over time as the herbaceous species were replaced by woody shrubs and saplings. This would likely result in increased shade, cooler temperatures and reduced aquatic habitat elements because of an increase in evapo-transpiration.

Maturation of the native and non-native woody species present along the shore in the project area would likely continue. Additional native and non-native species such as black cottonwood, willow, Scot's broom and blackberry would be expected to establish over time. Existing trees (black cottonwood and native and non-native willows) would mature and perhaps topple, thereby providing the opportunity for increased structural complexity along the shoreline (dependent upon Parks policies for leaving woody debris in the waters edge near public beaches and boat launching sites).

Overall, the no action alternative would likely result in the establishment of a mixed (deciduous and coniferous) woodland and shrub community over the majority of the open space areas of the site. The adoption of the Sand Point Magnuson Park Vegetation Management Plan (VMP, December 13, 2001) would mean that invasive species present within the natural habitats on site would be managed for removal over time, based on budget and staff availability. Removal and control of invasive species, based on the directives of the VMP, would result in replacing them with native trees and shrubs adapted to the conditions within each project-specific area of the Park.

## **2.5 ALTERNATIVES NOT CONSIDERED IN DETAIL**

One of the requirements of SEPA is that reasonable alternatives be analyzed that could feasibly attain the project objectives. The purpose is to limit the number of alternatives subjected to full environmental review. The lesser-capacity alternative analyzed in this EIS provides a reasonable alternative. The analysis of the lesser-capacity alternative's environmental impacts will provide decision-makers with useful information about the project proposal itself.

Several alternatives were considered initially but have been excluded from detailed development and analysis in this EIS, as discussed below. These include: expanded sports field capacity; expanded wetland/habitat area; use of natural surfaces and lighting; and alternative sites.

### **2.5.1 Expanded Sports Field Capacity**

Numerous sports field advocates have suggested that a much higher number of sports fields should be developed at Sand Point Magnuson Park. Plans for the park have been developed showing more sports fields over a larger portion of the site, diminishing the area available for a wetland/habitat complex. This alternative is not evaluated in detail in the EIS because it does not demonstrate a balance between the uses envisioned for the project, and therefore would not meet the objectives identified for the project. In 1999, the City Council was offered the opportunity to approve a concept design that included more sports fields but rejected it, indicating the Council's commitment to a balanced development. The lesser-capacity alternative includes some analysis of a less intensely developed wetland and habitat area.

### **2.5.2 Expanded Wetland/Habitat Area**

While not as developed as proposals for more sports fields, there have also been designs with fewer sports fields and more wetland and habitat area. This alternative is not evaluated in detail for the same reason that the expanded sports field alternative is not included. It does not reflect the City Council's objective for balance among the uses and would not reflect a sufficient expansion of recreational opportunities. The lesser-capacity alternative includes some analysis of a less intensely-used sports field complex.

### **2.5.3 Natural Surfaces and Lighting**

Consideration was given to evaluating an alternative that includes no lighting or synthetic surfaces on the sports fields. Discussion of the environmental impacts anticipated without lit and synthetic-surfaced sports fields is presented in the analysis of the no action alternative in **Chapter 3** of this EIS. An alternative that would highlight these parameters is not evaluated in detail because it does not meet the City Council's determination that lights and synthetic surfaces are needed to provide sufficient capacity in response to demand for expanded recreational opportunities. The Council's preference to use synthetic turf on some sports fields was based in part on the desire to limit the total number of fields needed, because the synthetic surfaces can accommodate higher levels of use.

### **2.5.4 Alternative Site(s)**

A number of Draft EIS reviewers criticized the document for not including an evaluation of an off-site alternative to the proposed action. An off-site alternative/alternative site(s) concept was in fact evaluated in the Draft EIS, but it was not considered in detail. For the Final EIS the off-site alternative/alternative site(s) remains a concept that is not considered in detail, for a variety of valid reasons.

Reasonable alternatives to a proposed action must support the proponent's objectives for the action. The proposed project is focused on the development of Sand Point Magnuson Park. The Sand Point Reuse Plan and the Concept Design for Magnuson Park were prepared to guide the development of the former military facility into a multi-use regional park. Locating the proposed wetland/habitat and athletic field facilities in other locations would not attain that goal. Because an off-site alternative would not fulfill the documented objectives of the Department of Parks and Recreation and the Seattle City Council for Sand Point Magnuson Park, an alternative site would not constitute a reasonable alternative under SEPA.

As indicated in **Section 2.1.1**, the Joint Athletic Fields Development Plan (JAFDP) provides programmatic guidance to the Department of Parks and Recreation on the development of athletic fields citywide. Various sites were considered for needed athletic facilities in the development of the JAFDP. The 1997 JAFDP identifies the preferred locations for a large number of these facilities, which include lighted, synthetic-turf fields at Sand Point Magnuson Park as well as sites at four Seattle School District properties (Denny/Sealth, Addams/Hay, Rainier Beach and Ingraham), as relatively near-term development objectives. The 2002 update to the JAFDP (Seattle Department of Parks and Recreation, 2002) identifies a total of 17 locations city-wide for which new synthetic-turf sports fields (or conversion of existing natural-turf fields to synthetic surfaces) with lighting systems are proposed. The JAFDP proposals also include many other locations at which existing sports field lighting systems would be replaced with improved systems.

For an alternative course of action to be a reasonable alternative, it must be able to feasibly attain or approximate a proposal's objectives while resulting in lower environmental costs or impacts. The Department of Parks and Recreation is not aware of any alternative site in Seattle that is comparable to the proposed project site in the ability to accommodate a large number of new sports fields, and therefore in the ability to support a comparable increase in field use capacity. In addition to being a large site, the proposed site at Sand Point Magnuson Park is a level area that has been previously disturbed by construction and demolition activities; development of a sports field complex in this location would therefore be relatively easy in physical terms, and would likely result in significantly lower impacts from clearing and construction than would occur at plausible alternative sites. Based on the locations identified for sports field improvements in the JAFDP, it is also likely that any alternative site that could be considered for development of multiple lighted sports fields would likewise be adjacent to residential areas. Therefore, it is not reasonable to expect that the lighting impacts on nearby neighborhoods that were objectionable to many of the Draft EIS reviewers could be avoided by developing the proposed sports fields at an alternative site; those impacts could be shifted to different neighborhoods, but neighborhood lighting impacts of a similar magnitude would still occur.

A final consideration relevant to an off-site alternative is the concept that another site in the city could *substitute for* Sand Point Magnuson Park as a location for a complex of lighted sports fields, i.e., that lighting impacts could feasibly be transferred from the Sand Point area to some other portion of the city. As indicated previously, virtually any Parks Department or Seattle School District property that might otherwise be a plausible alternative site is already identified in the JAFDP as a proposed site for development of lighted sports fields. Full or even partial implementation of the JAFDP would result in both a significant expansion of capacity to support team sports activities in Seattle and the development or redevelopment of lighted sports fields in virtually every neighborhood or sector of the city. Therefore, the availability of *substitute* sites for Sand Point Magnuson Park is very limited, at best.

Based on the considerations discussed above, there is not likely to be an alternative site that could feasibly attain or approximate the Parks Department's objectives for the proposed action and do so at a lower environmental cost. Therefore, an off-site alternative does not warrant detailed consideration in this EIS for the athletic facilities currently proposed at Sand Point Magnuson Park.

## **2.6 RELATION TO OTHER REVIEW AND DECISION PROCESSES**

There are several pending or proposed projects at Sand Point Magnuson Park that are proximate to the project site and relevant to the proposed action. Descriptions of these areas/projects are provided below, including, as appropriate, a discussion of the status of the environmental review and decision-making for each project. These projects are considered, as appropriate, in the evaluations of cumulative impacts presented for the respective resources in **Chapter 3** of the EIS.

### **2.6.1 North Shore Recreation Area**

The North Shore Recreation Area is an approximately 27-acre area located in the northwestern portion of Sand Point Magnuson Park. During the winter of 2000-2001 a preferred plan was generated to redevelop the North Shore Recreation Area as a non-motorized boating center. The resulting preferred plan provides for 3 docks and 3 ramps, a beach in front of the existing bulkhead, floats off the existing pier, a trail connecting this area to Sand Point Way NE, re-vegetation of portions of the waterfront, on-land boat storage, parking, a waterfront trail, a picnic area with shelter, and a waterfront promenade. Part of Building 31 and the boathouse would be removed. SEPA review on this proposal has been completed and a Joint Aquatic Resources Permit Application (JARPA) has been prepared. Because most of the proposed work would be within 200 feet of Lake Washington, numerous local, state and federal permits will be required for construction. Phased construction on the proposed improvements may start in 2003.

### **2.6.2 Community Garden**

The Magnuson Community Garden is planned for a 4-acre area located to the east of the Community Activity Center (Building 406) in the north-central portion of Sand Point Magnuson Park. The community garden would be an organic garden intended to foster environmental stewardship, horticultural education, rejuvenation and recreation. Funding for the project was received in the spring of 2000. The Magnuson Community Garden Coalition has worked over the past 18 months to develop a concept design for the community garden, and is now working to raise additional funds for its construction. The Department of Parks and Recreation will complete the design and construction documents for the garden based on the community developed concept plan. The Sand Point P-patches were relocated from their current location at NE 70<sup>th</sup> and Sand Point Way NE in fall 2001 and will become a component of the Community Garden. DPR completed a SEPA checklist and Determination of Non-Significance (DNS) for this action in late summer 2001.

The Community Garden, or some other appropriate site within Sand Point Magnuson Park, could be used as the location of a native plant nursery to support the long-term restoration plans for the park. Under the stewardship of citizen groups, a native plant nursery would provide opportunity for long-term involvement for all age levels in the stewardship actions in the park. It would also provide affordable plant material in the quantities necessary for the phased approach to habitat creation and enhancement on the site.

### **2.6.3 Off-Leash Area**

The Off-Leash Area is an approximately 9-acre area located in the central portion of Sand Point Magnuson Park and extending via trails to the Lake Washington shoreline. Improvements to this area have been initiated, including fencing and gates, an improved trail, parking, picnic shelters and a water source. The Department of Parks and Recreation is completing the design as well as applications to the Army Corps of Engineers for the second phase of work, which includes shoreline renovations and lighting. DPR completed a SEPA checklist and DNS for the upland portion of the Off-Leash Area in summer 2001. The Department completed the SEPA review for the trail lighting and improvements to the shoreline portion of the project in early 2002. A JARPA is currently in preparation. After permits are issued by the Corps, Sand Point Magnuson Park staff will continue and complete the second-phase improvements.

### **2.6.4 Promontory Point**

Promontory Point is an approximately 15-acre area located in the southeastern portion of Sand Point Magnuson Park that was the site of the former gravel pit, outdoor storage area and firing range. The Magnuson Environmental Stewardship Alliance has received funding to begin the rehabilitation of Promontory Point. To date, volunteers and the Sand Point Magnuson Park Division of DPR have removed several old buildings, planted over 3,000 plants, refurbished several trail sections, installed new signs, built a covered shelter, and led the design and planting of a butterfly garden. The stewardship of this area will continue.

### **2.6.5 Community Campus Uses**

The Community Campus area encompasses approximately 33 acres in the western portion of Sand Point Magnuson Park. The majority of the former Naval Station Puget Sound, Sand Point buildings are located in this area. There are several other projects that are at various stages of planning and implementation in this area. Recent activity on the larger of these projects is described below.

- Building 18 (former fire station and house) – To be redeveloped for non-residential artist studios and special projects. The Sand Point Arts and Cultural Exchange is currently developing its organizational infrastructure and planning for a capital campaign to raise funds for building renovations.
- Building 406 (former brig) – Was designated to become a Community Activity Center in the Magnuson Park Concept Plan (1999). Funding has been obtained for renovations to the building so that it can better function as an activity center.
- Building 25 (former administration building) – Northwest Montessori School elementary and middle school students will likely move in between 2002 and 2003.
- Building 29 (former hospital dispensary) – The University of Washington School of Public Health administrative offices and classrooms will likely move in between 2002 and 2003.
- Building 47 (former recreation center) – To be remodeled to become the Community Recreation Center. Some funding has been obtained; however, adequate funding has not been obtained to renovate the pool, showers and locker rooms. Construction work on the remodel is expected to begin in 2002.

### **2.6.6 Tennis Center**

Through its long-term planning processes, the Department of Parks and Recreation has identified the need for a tennis center in the northern portion of Seattle. The *Seattle Parks and Recreation Plan 2000* specifically identifies development of an indoor tennis facility at Sand Point and replacement of the existing outdoor tennis courts at Magnuson Park, both per the direction of the 1999 Magnuson Park Concept Design, as items in the 6-year action plan for 2000-2006 (Seattle Department of Parks and Recreation, 2001). The proposed location for a tennis center, which would include 8 outdoor and 6 indoor tennis courts, is just to the north of Building 47 (the future Community Recreation Center). Specific plans for funding, constructing and operating this facility have not yet been developed.

### **2.6.7 Boat Launch**

Plans are being developed to complete major maintenance improvements to the motorized boat launch on Lake Washington in the southeastern sector of Sand Point Magnuson Park. These improvements include ADA-related modifications to the surfaces of the existing launching piers to make them level surfaces. This would include replacement of the deck surface with a more habitat-friendly grated surface near the shore. Possible in-water improvements include renovation and extension (or possible replacement) of the ramp surface. A seasonal temporary pier extension is also under consideration. These improvements are in concept development stages, and specific plans and schedules are not yet available.

### **2.6.8 Transitional Homeless Housing Phase 2**

The Sand Point Community Housing Association (SPCHA) has developed 97 units of transitional homeless housing in existing buildings consistent with the Sand Point Reuse Plan. The Sand Point Reuse Plan allows for an additional 103 units to be developed. The SPCHA anticipates hiring an architectural firm and beginning design and fundraising for the second phase of the housing in the fall of 2002. Two of the locations where new housing construction is anticipated are across 65<sup>th</sup> Street and across Sportsfield Drive from the proposed athletic fields complex. In 1996 general schematic drawings were prepared to verify that the number of anticipated units could be developed at each location. No further design has been developed for this residential development. The SPCHA anticipates beginning a design process in late 2002 and anticipates construction in 2003/2004.